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A POSITIVE, POPULAR ART: SOURCES, STRUCTURE, AND IMPACT
OF GYORGY KEPES'S *LANGUAGE OF VISION*

By

LEIGH ANNE ROACH

A Dissertation submitted to the
Department of Art History
in partial fulfillment of the
requirements for the degree of
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For Scott

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ABSTRACT

The chief objective of this study is to establish the sources of Gyorgy Kepes's visual theory as expounded in his 1944 book *Language of Vision*, and examine his synthesis of these sources in a form that was so popular that his theoretic metaphors are still alive today. The very longevity, pervasiveness, and adaptability of his ideas have contributed to a recent tendency to make inaccurate assumptions about Kepes's sources and misconstrue his goals. Growing scholarly attention to Kepes's work and theory is hampered by the lack of focused scholarly work on this book, his most concentrated source of his ideas on art, design, and vision.

This dissertation looks at the contributions of Kepes's mentors, friends, and colleagues—artists, scientists, philosophers, writers, and teachers—whom he met in the principal places he lived leading up to the publication of his book—Budapest, Berlin, London, and Chicago. In particular, this dissertation examines the theoretical or philosophical sources these colleagues turned to in their own work: advertising psychology based to a large degree on ideas of philosopher Wilhelm Wundt; theoretical approaches to new media; Gestalt psychology; and language concepts of the Unity of Science movement. This dissertation asserts that Kepes found both a common social concern among these colleagues and an underlying unity to their varied approaches that he fused into the potent and flexible metaphor of vision. He applied this metaphor to advertising design, but he and others have broadened it to include art, architecture, other forms of design, and perception. Both anchoring Kepes's theories and traversing broad areas of visual theory, art pedagogy, and commercial art, this study intends to contribute to a broader understanding of mid-twentieth-century art theory and practice.

CHAPTER 1

INTRODUCTION

In the mid-1940s, art and design professors who had come to American universities before World War II to escape the turmoil in Europe began to produce a stream of publications on the nature of art, design, and perception. German and Austrian studies in philosophy and psychology formed part of the bedrock along which this stream flowed, but these writers did not simply redirect the stream from Europe to America. They adapted to the conditions found in the United States and they participated in a fruitful exchange with American writers and thinkers.

The earliest of the European émigré writers to publish in this period was the Hungarian Gyorgy Kepes (1906-2001), whose book *Language of Vision: Painting, Photography, Advertising-Design* first appeared in 1944 (figs. 1, 2).¹ In the years following its publication, other art educators and theorists including Germans Josef Albers and Rudolf Arnheim, Austrian Viktor Lowenfeld, and Hungarian László Moholy-Nagy contributed to the growing stream of publications by émigré writers. In their books they treated similar concerns, but few of their publications captured and sustained such wide interest as Kepes's *Language of Vision* did. His book quickly became a staple of the classroom and studio. In 1955, historian of art education Frederick Logan in *Growth of Art in American Schools* called Kepes's book "the most influential single volume in art education in the 1940's and early 1950's."² In a 1968 *Art in America* article, Douglas

¹ Gyorgy Kepes, *Language of Vision* (Chicago: Theobald, 1944). Kepes's surname name is pronounced "Kep-esh." His first name appears variously as Gyorgy, György, George, or Jerry. The dust jacket, designed by Kepes, displays the subtitle *Painting, Photography, Advertising-Design*.

² Frederick Logan, *Growth of Art in American Schools* (New York: Harper and Row, 1955), 255-57.

Davis said of the book, “[A] brilliant analysis of visual communication, it has become a handbook of sorts among those involved with education in the visual arts and architecture.”³

Despite these assessments, and despite the book’s impact on art education and in perpetuating certain aesthetic beliefs to generations of artists, scholars have failed to give this book or its author the attention each merits. The book has been in print for more than six decades, and, while no longer a standard text, it still occasionally appears on art and design course syllabi. While Kepes did not introduce a new form of visualization or representation, he melded the many strands of exploration and experimentation in twentieth-century visual rhetoric into an overarching synthesis. The book became seminal in the 1940s and 1950s because through it Kepes was able to naturalize this synthetic rhetoric for artists, designers, students, and teachers. He offered a unified, consolidated, understandable means of absorbing and accommodating the many elements of a modern “visual language.” In order to understand more fully this period’s art, design, and art pedagogy, which so often embraced notions of a “language of vision,” it is necessary to analyze this book and its context. A study such as this takes on added interest in light of recent scholarly attention to vision and visuality in the nineteenth and twentieth centuries, to word and image studies, and to reconsiderations of Cold War art and architecture stimulated by greater access to art and archives following the breakup of the Soviet Union. Further, it benefits from recent reassessments of structuralism and the cultural role of commercial art.

This dissertation will focus on Kepes’s explication of this language of vision, on its transmission through art education and cultural criticism, and on its transformation by gallery artists, commercial artists, art teachers and students, and cultural critics at mid-century. I will delineate the structure of this language, looking closely at the sources Kepes synthesized to help develop it, focusing my analysis particularly on its overlooked commercial roots and on the significance of this source for Kepes and for his readers. I will examine three fields—perception psychology, advertising, and art education—and map overlapping junctures in these fields to offer a more complete picture of his thought.

³ Douglas M. Davis, “Gyorgy Kepes: Searcher in the New Landscape,” *Art in America* 56, no. 1 (Jan.-Feb. 1968): 38.

I will place this language within the cultural context of mid-twentieth-century America, situating Kepes and his development of a visual language as an important wellspring for a later stream of writers and artists. I will trace the flow of Kepes's thinking through the work of certain writers, artists, and designers of the 1950s to demonstrate the transmission and transformation of ideas about this visual language through art education practices.

Using archival materials, interviews, and memoirs, I trace the artistic, intellectual, and social sources of the book. Contemporary writings and responses to the book as well as the work of scholars of art history and other fields help me establish the social and historical context. Examinations of philosophical and psychological sources and concepts current in the first half of the twentieth century offer context and structure for the ideas put forth in *Language of Vision*. Not least, I look to particular works of art to illuminate this subject.

Language of Vision is not very long—228 pages—with mostly black and white illustrations. The book is divided into three sections, titled Plastic Organization, Visual Representation, and Toward a Dynamic Iconography. Illustrations depict the gamut of world art, from Peruvian textiles, through Chinese painting and Russian icons, canonical Renaissance and modern paintings, to twentieth-century print advertising (figs. 3-6). These illustrations, as well as those of classroom exercises and photography, appeared mostly without explanatory captions. Readers were expected to discover for themselves how the illustrations amplified the nearby text (fig. 7). Kepes peppered the text with such phrases as “the space span of plastic organization,” “the space-time background,” or “a new, vital structure-order.” His language can seem opaque and dense, yet the book has attracted generations of artists, designers, and art lovers, perhaps because of its dense sense of fruitful possibility.

Language of Vision was accepted not only as a text for art education, but as an important work of aesthetic theory, suggested by its citation in the “Selected Current Bibliography” of the *Journal of Aesthetics and Art Criticism*'s December 1945 issue. Furthermore, *Language of Vision*'s perceptual concepts were given serious consideration for many years, although they now have diminished in impact. In the pages of *Leonardo* in the 1970s, for instance, these concepts figured in James J. Gibson's ongoing

discussions of his picture perception theories, stirring responses from Rudolf Arnheim, David Topper, Nelson Goodman, and E. H. Gombrich.⁴

As indicated by the book's title, Kepes's concern was both vision and language. Kepes acknowledged his debt to other artists whom he knew through their work or in person. In his emphasis on vision, he was preceded by artists and writers including El Lissitzky, Fernand Léger, and László Moholy-Nagy, whose work he included in *Language of Vision* (figs. 8, 9). These artists urged full use of technologically modern mediums such as photography, photomontage, posters, and film both to mirror and shape modern vision.⁵ Photography and film addressed not only the need for new art forms, but also supplied notions of a "new vision" appropriate for modern life in the early twentieth century. Between the world wars, New Vision ("neue Optik," or "neue Sehen")

⁴ James J. Gibson points out in his article, "The Information Available in Pictures" he points out the fallacies in current perception theories, including those of Nelson Goodman and Kepes. See Gibson, *Leonardo* 4, (Winter 1971): 27-35. Letters in response by E. H. Gombrich, Rudolf Arnheim and James J. Gibson appeared in *Leonardo* 4, (Spring 1971): 195-199. Nelson Goodman added to the discourse in *Leonardo* 4, (Autumn 1971): 359-60. Kepes's ideas diminished in importance, but the larger discussion continued through the 1970s. See Dennis Couzin, "On Gibson's and Goodman's Accounts of Depiction," *Leonardo* 6, (Summer 1973): 233-235 and Gibson's letter in *Leonardo* 6, (Summer 1973): 284-285. In 1978 Gibson mentioned but did not discuss Kepes's language of vision in "The Ecological Approach to the Visual Perception of Pictures," *Leonardo* 11, (Summer 1978): 227-35. Letters and comments in response by Gombrich, Goodman, David R. Topper, and Rudolph Arnheim in *Leonardo* 12, (Spring 1979): 121, 135, 174-75. Portions of Gibson's article appear in his *The Ecological Approach to Visual Perception* (Hillsdale, N.J.: Lawrence Erlbaum Associates, 1979).

⁵ In his 1925 essay "A. and Pangeometry," for example, El Lissitzky discusses conceptions and representations of space on a two-dimensional surface through history. He takes into consideration new images afforded by photography and motion pictures, as well as new concepts of time and space that alter our perceptions and therefore require new art responses. See El Lissitzky, "A. and Pangeometry" in Sophie Lissitzky-Küppers, ed. *El Lissitzky: Life Letters Texts* (London: Thames and Hudson, 1967), 352-58. In a lecture delivered at the Museum of Modern Art, Léger considered the effects on our vision of the new commercial spectacle of urban window display, which emphasizes the object itself, helping free modern minds from the need for pictorial representation. He also treated new views allowed by film, such as microbes in a drop of water, as approaches to abstraction in painting. Fernand Léger, *Functions of Painting*, trans. Alexandra Anderson, ed. Edward F. Fry (New York: Viking, 1965), 109-13.

photography and film of Europe sought to “revolutionize the visual language not only of the arts but also of an entire culture.”⁶

Moholy-Nagy, chief proponent of the new vision, gave the movement its name in his book *Malerie Photographie Film* first published in 1925.⁷ In the introduction Moholy-Nagy wrote:

The camera has offered us amazing possibilities, which we are only just now beginning to exploit. The visual image has been expanded and even the modern lens is no longer tied to the narrow limits of our eye; no manual means of representation (pencil, brush, etc.) is capable of arresting fragments of the world seen like this . . . [I]t is only in recent years that the course of development has allowed us to see beyond the specific instance and recognize the creative consequences. Our vision has only lately developed sufficiently to grasp these connections.⁸

Kepes wrote *Language of Vision* while teaching with Moholy-Nagy at the New Bauhaus (later School of Design) in Chicago in the late 1930s and early 1940s (figs. 10, 11, 12). Kepes had left his native Hungary in 1930 for Berlin, where he collaborated with Moholy-Nagy on theatre design, photography, and commercial assignments. (Besides Moholy-Nagy, Kepes’s circle of friends in Berlin included Éva Besnyő and other New Vision photographers.⁹) Moholy-Nagy eventually emigrated to London, and Kepes followed him there to continue their collaboration, which included store window design and experimental filmmaking. When Moholy-Nagy moved to the United States in 1937

⁶ Christopher Phillips, “Resurrecting Vision: The New Photography in Europe Between the Wars,” in Maria Morris Hambourg and Christopher Phillips, *The New Vision: Photography Between the World Wars* (New York: Metropolitan Museum of Art, 1989), 66. This seminal exhibition applied the term broadly to inter-war modernist photography of Europe and the United States.

⁷ Matthew S. Witkovsky, *Foto: Modernity in Central Europe, 1918-1945* (Washington, D. C.: National Gallery of Art, 2007). Witkovsky discusses the origin of the term New Vision in “Starting Points,” 10-23.

⁸ László Moholy-Nagy, *Painting Photography Film*, trans. Janet Seligman (Cambridge, Mass.: MIT Press, 1967), 7. This book was first published in 1925 as Volume 8 of the *Bauhausbüchler* series.

⁹ Witkovsky, 81-83. On page 220 Kepes is mistakenly noted as a Bauhaus graduate.

to establish an American art school on Bauhaus principles, he requested that Kepes join him on the faculty.

As with his concerns about vision, Kepes's interest in concepts of language-like systems also has precedents in early twentieth-century art. Such artists as Apollinaire, Kurt Schwitters, Dadaists, and Kepes's mentor Lajos Kassák (1887-1967) combined image and word in art that made use of advertising forms, or in actual advertisements, which became a particular focus of Kepes. Early filmmakers such as Sergei Eisenstein, whose theories included notions of both image and language, preceded Kepes's concepts of vision and language. Through his work with Moholy-Nagy in Berlin, Kepes met Russian filmmakers Eisenstein, Vsevolod Pudovkin, Alexander Dovzhenko, and Dziga Vertov.¹⁰

The construction of vision in terms of language—a project that integrates the interests mentioned above—also pre-dates Kepes's work, especially in the writing of Amédée Ozenfant and Charles-Edouard Jeanneret (Le Corbusier), whose books Kepes read as a student.¹¹ In Ozenfant and Le Corbusier's *La Peinture Moderne* is found an emphasis on the “modern optic” linked with a new “plastic language” of a universal nature. Kepes would expand these ideas, originally directed by Ozenfant and Le

¹⁰ Kepes said, “I had the opportunities to get acquainted with some of the great filmmakers, and talk to them and get stimulated, and that was very important for me. In this time there was still a communication between the Russian intellectuals and the Western intellectuals, and Moholy was a name for some of the Russian filmmakers—Eisenstein, Pudovkin, Dovzhenko, and Dziga Vertov. And some of them were visiting Berlin. I met them. I made a point to keep contact with them. . . . I remember once going on a long walk with Dovzhenko and his wife in Berlin. . . . It was his film's [The Earth] premiere in Berlin. . . . And I was somehow the little mentor for them [showing] them around. And it was a great experience to learn what motivated them.” Kepes interview by Dorothy Seckler, 18 August 1968. Archives of American Art, Washington, D.C.. I have used my transcription of the Seckler audio tape.

¹¹ About his and his friends' interests at the Budapest Academy of Art the mid-1920s Kepes said, “We're looking at modern art in foreign magazines we could get hold of, you may know the *Cahiers d'Art* in France, and we had the books of Ozenfant and Corbusier, whatever we could get as a window to see what happens in this search for new meaning.” Kepes interview by Robert Brown, 7 March and 30 August, 1972; 11 January 1973. Transcript. Archives of American Art, Washington, D.C.

Corbusier toward their own concept of Purism, in a more general way toward both easel and commercial art and, to some extent, architecture.¹²

The phrase “language of vision,” which Kepes popularized, took hold firmly in the post-World War II era, following a long period during which art training emphasized the training of the eye to see rather than on training the hand to draw. Howard Singerman argues in his *Art Subjects: Making Artists in the American University* (1999) that this shift is rooted in Cézanne’s advice to learn to see nature in terms of cylinders, cones and spheres, and that this teaching “became the founding story of modernism, and of design as *Gestaltung*.”¹³ According to Singerman, “Precisely when vision is stressed as primary and primordial, as the object of art education, primers and grammars and ABCs of art discover and multiply language—or the image of language—from Blanc’s 1867 *Grammaire des arts du dessin*, through the Bauhaus, to Kepes’s *Language of Vision*.”¹⁴

Kepes’s book is certainly part of this modernist linking of vision and language. But Kepes’s approach is distinguished from most earlier efforts to delineate dictionaries of art elements by his application of the idea of language as a structure for vision. His approach expands from the limited linguistic purpose of devising tools, such as dictionaries or grammars, to the much broader concept of a living language that synthesizes language and vision. For Kepes, a language of vision (or visual language—he used the terms interchangeably) went beyond the limits of compositional rules to integrate both the functions of artist as transmitter and viewer as interpreter of “optical communication.”¹⁵ But this visual language operated in a more complex way than a simple transmitter-receiver model suggests. The viewer was expected to participate as a creator of meaning, disciplining and educating his or her eye, shaping the nature of the

¹² See Amédée Ozenfant and Charles-Edouard Jeanneret, “Purism,” in Robert L. Herbert, ed. *Modern Artists on Art: Ten Unabridged Essays* (Englewood Cliffs, N.J.: Prentice-Hall, 1964), 58-73. Originally published in *L’Esprit Nouveau* 1920, no. 4, 369-386; and Ozenfant and Jeanneret, *La Peinture Moderne* (Paris: Crès, 1925).

¹³ Howard Singerman, *Art Subjects: Making Artists in the American University* (Berkeley: University of California Press, 1999), 86-89.

¹⁴ Singerman, 89.

¹⁵ *Language of Vision*, 13.

language, and thereby shaping the world.¹⁶ The language of vision encompassed both perception and structure and was both malleable and malleating.

Furthermore, Kepes's goal was to shape both a new way of seeing and a new way of artmaking so interrelated and mutually responsive as to produce a universally understandable, popular art with a socially progressive purpose. Because by the mid-twentieth century advertising had proved to be a powerful and immediate form of communication, capable of reaching masses of people quickly and inviting their response, it would provide the example of how such a thing would be structured. In the final sentence of the book, Kepes wrote, "If social conditions allow advertising to serve messages that are justified in the deepest and broadest social sense, advertising art could contribute effectively in preparing the way for a positive popular art, an art reaching everybody and understood by everyone."¹⁷

Although across its life the book was perceived by many as a "how-to" and was quickly accepted as a textbook, this is not what Kepes intended *Language of Vision* to be. Kepes saw the book as a way to order his own vision, and he called the book "the first attempt made to get to myself. . . . [I]t was an improvised book."¹⁸ Its original purpose, according to Kepes, was to bring order to his own discovery of "clearer and better" seeing. Kepes said,

I tried to structure whatever I know into legible form, and I collected my material and whatever there was, and my concrete reason to do it was, though naturally it had many a deeper reason, and deeper needs, I was interested to learn about the visual process and understand my own way of working and by being forced, or forcing myself, survey my knowledge or lack of knowledge, to put whatever I know, into relatively consistent sequential order. I was, actually, training myself to see clearer and better.¹⁹

¹⁶ *Language of Vision*, 202.

¹⁷ *Language of Vision*, 221.

¹⁸ Kepes interview by Brown transcript, 23.

¹⁹ Kepes interview by Brown transcript, 20.

In the Brown interviews, Kepes said the roots of the book begin in his time in Berlin in the early 1930s. One of his fellow boarders was a student of the Gestalt psychologist Wolfgang Köhler, and Kepes recalled, “From this neighbor, as young people stop to argue and discuss everything, I learned something about Gestalt psychology.” When Kepes began to outline his book years later in Chicago, these discussions came to his mind, and he undertook to read books on Gestalt. He said he “observed that some of their insight and some of their experimental knowledge had a great deal to do with the structuring of the visual image, also artistic image.” While he included much that was connected to Gestalt, he said, “yet naturally I had many other interests.”²⁰

While in his book Kepes emphasizes the idea of a unified vision grounded in Gestalt theory, he also shapes his thesis according to the theories of the Logical Positivists of Vienna, most particularly to the thinking of his colleague Charles Morris and his associate Otto Neurath, who together founded the Encyclopedia of Unified Science. Gestalt theories and theories associated with Unified Science, although not completely compatible, provided Kepes with a scholarly foundation to which he added early-twentieth century advertising and perception psychology, optics, as well as commercial art and fine art forms. Bauhaus pedagogical practices as adapted by Moholy-Nagy for American students along with a healthy dose of utopianism entered Kepes’s mix, although he would later distance himself from the German Bauhaus. He applied this synthesis to what deeply concerned him—the description and development of a structured, socially-accountable, universal approach to perception and communication that could itself shape modern vision, experience, and the experienced world.

Because Kepes’s book became established as a standard text for teaching studio art, it has earned for itself a certain invisibility in the world of art and design theory. After an initial flurry of critical attention, scholarly interest tapered off until the 1970s, when scholars, particularly Gibson, responded to Nelson Goodman’s 1968 book *Languages of Art: An Approach to a Theory of Symbols* with reconsiderations of concepts of perception

²⁰ Kepes interview by Brown transcript, 20-21.

and language.²¹ Gibson defined two general theories for explaining what a picture is: the “sheaf of light rays” theory, and the “set of symbols” theory (with which Goodman, Kepes, Erwin Panofsky and Arnheim are aligned). Gibson found fault with both current theories for explaining the nature of pictures, and thus he developed his own.

More recently—in the 1980s and 1990s, forty or more years after its initial publication—a few more writers have taken serious, critical looks at the implications of the *Language of Vision*. But scholarship on Kepes’s notion is hampered by the fact that most scholars only write to readers within their fields—primarily design or architecture—and are unaware of the work of others outside their areas.

In the mid-1990s, graphic designers and writers Ellen Lupton and Abbot Miller attacked the subject of Kepes and a visual language in their essay “Language of Vision,” which appeared in their book *Design Writing Research: Writing on Graphic Design*. In this essay Lupton and Miller bring up “formal contrasts” as the basis of the visual language common to modern design textbooks like Kepes’s, this time explaining that “a ‘vocabulary’ of design elements (dots, lines, shapes, textures, colors) is organized by a ‘grammar’ of contrasts (instability/balance, asymmetry/symmetry, soft/hard, heavy/light).”²² They equate these design practices with Gestalt psychology, which they do not explain. Kepes, however, does not structure his book in terms of contrasting elements, but tends to speak of “fields” and “forces” in his first chapter. These “fields” and “forces” indeed are drawn from Gestalt, but have to do with theories of perception rather than with the practice of applying design elements. Kepes makes no attempt to teach composition by simple pairs of contrasts. The remainder of the book deals not with design elements but with the representation of space through history, with a call for the development of new modes of representation equal to the demands on vision in the modern world.

Lupton and Miller then shift their argument to perception, writing about *Language of Vision*, Rudolph Arnheim’s *Art and Visual Perception* (1954), and Donis

²¹ See note 3 for the exchanges of James J. Gibson and others in *Leonardo* during the 1970s.

²² Ellen Lupton and Abbott Miller, “Language of Vision” in *Design, Writing Research: Writing on Graphic Design* (London: Phaidon, 1994), 64.

Dondis's *A Primer of Visual Literacy* (1973). They wrote, "Pervading these works is a focus on *perception* at the expense of *interpretation*. 'Perception' refers to the subjective experience of the individual as framed by the body and brain. Aesthetic theories based on perception favor sensation over intellect, seeing over reading, universality over cultural difference, physical immediacy over social mediation."²³ [their italics] Kepes indeed emphasizes universality. Yet in *Language of Vision* he insists on expanding beyond sensation to interpretation and social interaction. He wrote, "Visual experience is more than the experience of pure sensory qualities. Visual sensations are interwoven with memory overlays. Each visual configuration contains a meaningful text, evokes associations of things, events; creates emotional and conscious responses."²⁴

Lupton and Miller also write

The term 'visual language' is a metaphor. It compares the structure of the picture plane to the grammar or syntax of language. The effect of this comparison is to segregate 'vision' from 'language.' The two terms are set up as analogous but irreconcilable opposites, parallel realms that will never converge. Theories of visual language and the educational practices based on them close off the study of social and linguistic meaning by isolating visual expression from other modes of communication.²⁵

They are correct in pointing out the futility of attempts to structure the visual in terms of the verbal, yet Kepes was vitally interested in increasing social and linguistic meaning, and he believed that it was possible to "fuse" the visual and verbal. He wrote,

Advertising art pioneered in testing representational images in combination with pure plastic units and verbal elements. Apollinaire in his ideograms, Miro [sic] in his painting-poem incorporate the written word in the plastic ensemble with a dynamic interaction of the verbal significance and the sensory qualities of the pictorial elements. These painters are fusing the two into one expression that evokes associations of great depth because of the sensory intensity of plastic values, and of great width because of the associations discharged by the linguistic basis.²⁶

²³ Lupton and Miller, "Language of Vision," 62.

²⁴ *Language of Vision*, 200.

²⁵ Lupton and Miller, "Language of Vision," 64.

²⁶ *Language of Vision*, 209.

In fact Kepes hoped eventually to merge the visual and the verbal in such time-based media as film and television in ways he felt were more profound uses of a language of vision than two-dimensional fields.²⁷

Roy R. Behrens, designer and writer, achieves a deeper understanding of Gestalt theory and its application to concepts of a language of vision in his 1998 essay “Art, Design and Gestalt Theory.” He mentions Kepes’s book only in passing as a significant distributor to artists of Gestalt ideas.²⁸ He responds to Lupton and Miller’s attacks on Gestalt theory by saying, “Curiously, Lupton and Miller use comparable methods to disavow gestalt theory: they abstract, simplify and reinterpret it, isolating it from much of its historical, linguistic and social background and, thereby, ironically, largely ignore its ‘cultural interpretation.’”²⁹

In *Art Subjects*, art historian Howard Singerman looks at how teaching art was integrated into the twentieth-century American university through the positing of vision as language, and as an experimental discovery- or problem-based project suitable to study at research universities. He sees texts such as *Language of Vision* as integral to the process of intellectualizing studio art and to producing artists as orderers of vision rather than crafters of objects. Singerman treats *Language of Vision* in a general way, noting the correspondence between Kepes’s visual fields, retinal fields, and picture fields with their forces and tensions, and similar concepts in Wolfgang Köhler’s Gestalt psychology.³⁰

As mentioned above, in a section titled “Language of Vision,” Singerman traces an art education trend beginning in the nineteenth century that moves away from representations of the body or the world as the subject of art toward an emphasis on the

²⁷ Kepes interview by Brown transcript, 21-22 . Kepes said, “And at the end of the book was what I wish I still could one day develop into a more complete notion. . . . I was interested in at least suggesting new directions, what I called dynamic iconography . . . It would have led to film making, to television, to the whole new idioms of kinetic or dynamic communications.”

²⁸ Roy R. Behrens, “Art, Design and Gestalt Theory,” *Leonardo* 31, no. 4 (1998): 301.

²⁹ Behrens, “Art, Design and Gestalt Theory,” 303.

³⁰ Singerman, 73, 75-79.

process of seeing. In his wide-ranging work, Singerman looks at a language of vision in terms of the structuralism of Roland Barthes and Rosalind Krauss, but he does not probe sources of such a visual language in sources grounded in commercial art or advertising psychology. His project, however, does not attempt to take on such a task.

In his 2002 essay, “A Natural History of a Disembodied Eye: The Structure of Gyorgy Kepes’s *Language of Vision*,” design historian Michael Golec analyzes Kepes’s book in order to discover “the foundations of, the deployment of, and the implications of” what Golec calls Kepes’s “natural history of vision.” His thesis is that “the fundamentally synthetic (and philosophically idealist) nature of Kepes’s notion of coming into wholeness—or integration—theorized a new society predicated on the refinement of vision at the expense of the corporeal, the material.”³¹ In contrast to Lupton and Miller, Golec finds Kepes’s approach not sensory-based but intellectually based, neglecting the body. Golec concludes his essay by examining the problems he believes Kepes raises by his attempt to “reconcile his ontogenetic-humanistic proclivities—his natural history—with what he took to be an advanced form of visual culture—contemporary advertising.”³² Golec ultimately finds that Kepes’s theory of visual language fails because he was “unable to reconcile the appearance of the world and the world as it exists materially.” The way we see remains stable, although Kepes believed it could be changed, while what we see is “contingent.”³³

Golec’s study is notable for his focus on Charles Morris’s logical positivism, his participation in the Unity of Science movement, and its implications for Kepes’s thinking, subjects not dealt with in the previous studies. Golec also carefully considers the conflicts between Helmholtz’s theories of optics and Gestalt theories, both of which Kepes cites. In his notes, he considers Singerman’s discussion of the import of

³¹ Michael Golec, “A Natural History of a Disembodied Eye: The Structure of Gyorgy Kepes’s *Language of Vision*,” *Design Issues* 18, no. 2 (2002): 3-16 Golec is an art historian with a background in graphic design.

³² Golec, 4.

³³ Golec, 16.

structuralist linguistics on the *Language of Vision*.³⁴ Golec does not search for other sources for Kepes's ideas, but he does insert the disclaimer that a "thorough study of the context in which Kepes positioned his book remains to be written" and he "will forego such a history."³⁵

Golec believes that Kepes proposed a visual reality whose "discrete units" could be taken apart and put back together to make an increasingly accurate picture of the world.³⁶ He tends to see Kepes's theory as atomistic, an idea which is at odds with Kepes's statements and interest in Gestalt psychology. Kepes supports not a simple assembly of parts, but the participation of the viewer in the making of associations of unrelated elements in order to arrive at new meanings, as he demonstrates in the section of *Language of Vision* called "Dynamic Iconography." Kepes discusses both seeing and image-making but insists on the interaction of the two functions. Unlike Kepes, Golec equates the specific message carried by advertising with its form. Golec writes, "The underlying structure . . . was a logic of desire whereby advertising ritualized cultural assimilation. It offered images that capitalized on a human propensity for mimesis, for assimilating that which one desired but could never acquire." As I will demonstrate in Chapter 2, Kepes reflected the activist Hungarian artist Kassák's understanding of advertising as a means of communication capable of stimulating people to imagine what they had not previously been able to, and thereby to move people to action which had the potential for social good.

In 2003, architecture professor Reinhold Martin published *The Organizational Complex: Architecture, Media, and Corporate Space*, in which he expands the definition

³⁴ Golec, 5 note 8. In note 26 on page 10 Golec cites Peter Galison, noting that the Bauhaus probably derived more from logical positivism than from a Saussurian model of linguistics. See Peter Galison, "Aufbau/Bauhaus: Logical Positivism and Architectural Modernism," *Critical Inquiry* 16 (Summer 1990): 709-752.

³⁵ Golec, 4. A point of Golec's which I will clarify in Chapter 2 with archival interviews is the book's lack of captions. Golec finds the choice of images have a randomness which is exacerbated by the lack of captions. Kepes explains that this layout was intentional. It was to force or allow associations in the manner of his new visual language.

³⁶ Golec, 9.

of “military-industrial complex,” derived from President Dwight Eisenhower’s farewell address in January 1961, to include aesthetic and technological components. Martin calls this extended structure the “organizational complex.” This organizational complex includes architecture which functions as a form of communication to hide corporate power by distracting users and integrating them into the organization complex. Martin’s work treats the 1956 book *The New Landscape in Art and Science*, edited by Kepes, as one of three case studies. Martin also reaches back to *Language of Vision* for terms and ideas Kepes introduced there in 1944 to exemplify the nature of the organizational complex and to support his premise. Martin sees the organizational complex as organic and derived from the nascent field of cybernetics. “Networked, systems-based, feedback-driven—this organicism, and the circuits of power that it serves, sustains myths of dynamic deregulation, corporate benevolence, and dispersed, de-hierarchized interactivity.”³⁷ Martin takes Kepes’s emphasis on “pattern-seeing” in *The New Landscape* as evidence of his complicity in the goals of a cold-war control society. Yet in *Language of Vision* Kepes envisioned the viewer to be participating with the artist in extracting meaning from the things, ideas, or images put (sometimes forced) into relationships with each other.

In the chapter “Pattern-Seeing,” Martin uses the ideas of the earlier and more theoretical book *Language of Vision* to explicate a collection of others’ essays and illustrations edited by Kepes, *The New Landscape in Art and Science*. In doing this, Martin applies to his interpretation of *Language of Vision* concepts unfamiliar to Kepes at the time he wrote the book. Martin paraphrases Marshall McLuhan and states that Kepes later published McLuhan’s work to make the point that for Kepes “the message being communicated by the language of vision lies in the properties of the media of optical communication themselves. This is where ‘organization’ literally enters the picture. The ‘organized image’ is not the carrier of a message; it is the message.”³⁸ In support of this idea, Martin quotes from *Language of Vision*: “To perceive a visual image implies the

³⁷ Reinhold Martin, *The Organizational Complex: Architecture, Media, and Corporate Space* (Cambridge, Mass.: MIT Press, 2003), 8.

³⁸ Martin, 62.

beholder's participation in a process of organization. The experience of an image is thus a creative act of integration. . . . Here is a basic discipline of forming, that it, thinking in terms of structure, a discipline of utmost importance in the chaos of our formless world." Martin concludes, "For Kepes, then, organization is nothing more—or less—than a media effect." Martin sets up a correlation between the *Language of Vision* and McLuhan's ideas that could only be coincidence, as McLuhan's first major work (*The Mechanical Bride*, 1951) was not published until seven years after *Language of Vision*. Martin's conclusion (for Kepes "organization is . . . a media effect") runs entirely counter to the meaning of Kepes's statement that the beholder, with creativity and discipline, acts as agent for meaning and order. Furthermore, Martin's tendency to link cybernetics and McLuhan's ideas to concepts in *Language of Vision* inverts the chronological possibility of influence. In addition to assuming McLuhan's non-existent influence on *Language of Vision*, Martin also discounts the importance for Kepes of the Theoretical Biology Club's interest in Gestalt psychology's notion of structure as dynamic, interactive relationships.³⁹

Martin assigns architecture the primary place in his scheme, and stretches Kepes's ideas, which in *Language of Vision* were aimed at commercial artists, to cover architecture. He adapts the philosopher Gilles Deleuze's notion of a control society to architecture as well. But while Martin brushes up against advertising here and there in this book, he does not take the opportunity to examine why Kepes saw in advertising an example of a structured carrier of meaning. He also does not make use of Deleuze's more pertinent concepts related to images, representation, or film to examine Kepes's visual language. Kepes's strongest interest at the time he wrote *Language of Vision* was in media such as film, photography, and advertising. Because works in such media can be understood as simulacra—neither authentic models nor inauthentic copies in the Platonic sense, but images without resemblance or hieratic position—Deleuze's notion that simulacra are capable of challenging ideals seems more applicable to Kepes's project than the idea of a control society.⁴⁰

³⁹ Martin, 52, 72.

⁴⁰ Gilles Deleuze, *The Logic of Sense*, trans. Mark Lester, ed. Constantin V. Boundas (New York: Columbia University Press, 1990). Deleuze's film theory might

In Chapter 2, I will establish the publication history of the book itself and illustrate its long-term popularity. I trace the origin of the idea of a visual language as explicated in Kepes's book, arguing that this notion was developed by Kepes and his colleagues at the School of Design and the University of Chicago, especially with contributions from philosophy professor Charles Morris. I also argue that it significantly differs from other earlier notions such as Kandinsky's "grammar of design," as it attempted not simply to provide a formula for good design, but tried to give structure to a characteristic new way of seeing and living in the modern world.

Chapters 3 through 5 correspond to the places Kepes lived until the completion of *Language of Vision*: Budapest, Berlin, London, and Chicago. Colleagues and mentors particular to each city offered two things to Kepes: certain theoretical approaches, and examples of strong senses of social conscience. In spite of seeming contradictions, he accepted and adapted these approaches, both theoretical and social, and blended and applied them to advertising art in *Language of Vision*.

In Chapter 3, I examine Kepes's experience with the avant-garde of Budapest in his student days, focusing on the attitudes of his mentor Lajos Kassák towards advertising as a structure for social reform, arguing that Kepes's beliefs about the social efficacy of advertising language revealed in *Language of Vision* were an extension of Kassák's approaches. I look at the psychology behind advertising of Kassák's time, examining its roots in the philosophy of Wilhelm Wundt.

In Chapter 4 I discuss Kepes's time in Berlin, his work with Moholy-Nagy, and his application of advertising psychology and Moholy-Nagy's ideas about advertising and graphic design work. I discuss Kepes's introduction to certain leading scientists in Great Britain who were members of the Theoretical Biology Club. I argue that their use of theoretical models from Gestalt psychology and their social activism informed *Language of Vision*. Furthermore, I argue that Kepes synthesized aspects of Gestalt and Wundtian theories.

also be related to Kepes's ideas and interests. See Gilles Deleuze, *Cinema*, transl. Hugh Tomlinson and Barbara Habberjam (Minneapolis: University of Minnesota, 1989).

Chapter 5 discusses Kepes's interaction in the late 1930s and early 1940s with his New Bauhaus colleague semiotician Charles Morris and Morris's colleague logical positivist Otto Neurath. Like Kepes's other colleagues and mentors, Morris and Neurath were committed to the idea of social progress, and their theories provided Kepes's book with the concept of vision as a meliorative language. Like the theories discussed in earlier chapters, Morris's and Neurath's thought is more compatible and less directly opposed to Gestalt psychology than has been assumed.

In Chapter 6, I consider Kepes's ideas in *Language of Vision* in relation to an interest in structuralism common to many fields in the first half of the twentieth century.

CHAPTER 2

THE PUBLICATION OF *LANGUAGE OF VISION*

Language of Vision hit bookstores in 1944 during the depths of World War II. Its promise of the possibility of order in a chaotic world no doubt accounted for much of its appeal. Yet long after the war was over, the book continued to gain readers and remained in print. In the post-war years of Abstract Expressionism, in the conflicted 1960s when art's compass needle spun from Pop to Minimalism to Happenings, through postmodernism's critique of much of what *Language of Vision* stood for, the book kept selling. In order to understand the book's importance and appeal, it is necessary to establish its background.

In this chapter, I orient the reader to the book itself. I focus on the book's organization and contents, its road to publication, and early reviews. I illustrate its long-term popularity and use in art education. I also set the book into relationship with earlier books of a similar nature, in order to better understand its popularity and the nature of its hold on readers' imaginations. Its popularity was due to many factors. The enrollments of many art and design schools expanded at the end of World War II, as veterans took advantage of the G.I. Bill. At the time of its publication there were few graphic design books that blended modern theory with examples of art ranging widely from cave art to modern advertising. In this chapter, I argue that the book's strength and longevity are due in large part to the book's holistic approach. Following Kepes, I take "holistic" to mean that art, mental and sensory processes, including vision, and the experience of the material world are all in a dynamic and interconnected relationship. As our understanding of the material world develops, so there is an evolution in sensory comprehension and a concurrent deepening of human experience. To isolate one aspect for analysis is to fail to understand the spatio-temporal and experiential interrelationships of all the components.

The book's emphasis is on an expanded "vision" capable of recognizing and implementing relational structures for the support of art and ultimately of life.⁴¹

The idea of a language of vision is naturally at the core of this approach, so it is necessary to define it, at least in a general way, for the purposes of this chapter. Kepes understands the concept of a language of vision in the broadest of terms, as a metaphor. For him it is a capacity, like sight, that can be ordered or structured in a language-like way and used to communicate. The term does not directly refer to art making or rules for handling formal art elements, although in Kepes's broad view, it can include art making. The application of the ideas in Kepes's book are intended to have effects far beyond training of artists. A capacity for seeing and communicating interrelationships within and among social, political, scientific, and artistic fields will lead us toward a more perfect future life.

Language of Vision is organized into three chapters: 1. Plastic Organization, 2. Visual Representation, and 3. Toward a Dynamic Iconography. Three essays function as preface. The urgent concern to order our conscious experience that runs through Kepes's book can be seen in the introductory essays "Art Means Reality," by Sigfried Giedion (1888-1968) and "The Revision of Vision," by Samuel Ichiye Hayakawa (1906-1992). Giedion was a noted architectural historian and author who was the first secretary-general of the *Congrès International d'Architecture Moderne* (CIAM), founded in 1928. Hayakawa was a semanticist, psychologist, educator, and writer, whose *Language in Action* (1941) helped popularize general semantics, as founded by Alfred Korzybski earlier in the century. At this time, Hayakawa was teaching at the Armour Institute of Technology (now Illinois Institute of Technology) in Chicago. Both Giedion and Hayakawa taught or lectured at the New Bauhaus/School of Design.

In these introductory essays, nineteenth-century individualism is viewed as harmful to the social fabric. An atomistic view of the world is rejected as a further relic of the past. Art should be universally understandable, yet we should make no assumptions about the absolute quality of any particular mode of seeing. This urge to set art and life into orderly relational structures permeates not only Kepes's, Giedion's, and Hayakawa's

⁴¹ For more on holism, see Jerry Fodor and Ernest Lepore, *Holism: A Shopper's Guide* (Oxford: Blackwell, 1992).

thought but also the ideas of many other philosophers, psychologists, artists and thinkers in the first half of the twentieth century. Hal Foster calls this period in the 1940s and early 1950s “a moment for grand speculations on art and architecture” during which certain writers, Giedion and Kepes among them, operated in a “totalizing mode.”⁴²

In the opening essay for *Language of Vision*, as in his recently published *Space, Time, and Architecture* (1941) Giedion sounds a theme that will recur throughout the book—the need for a reintegration of a fragmented world. He sees a split between “advanced methods of thinking and an emotional background that has not caught up with these methods.” He decries change for the sake of change, which he sees as a false need characteristic of the nineteenth century. These problems have resulted in a “demand for continuity” in the present day. Kepes, says Giedion, traces the twentieth-century artistic and visual movements toward “a new spatial conception,” and a reintegration of art with reality.⁴³

In his introductory essay for *Language of Vision*, Hayakawa emphasizes that old ways of ordering experience operate “atomistically” and fail to set elements of experience in a relational structure. “The language of vision determines, perhaps even more subtly and thoroughly than verbal language, the structure of our consciousness,” he writes. “When we structuralize the primary impacts of experience differently, we shall structuralize the world differently. The reorganization of our visual habits so that we perceive not isolated ‘things’ in ‘space,’ but structure, order, and the relatedness of events in space-time, is perhaps the most profound kind of revolution possible—a revolution that is long overdue not only in art, but in all our experience.”⁴⁴

⁴² A footnote to Hal Foster’s essay “Archives of Modern Art,” in the course of which he discusses André Malraux’s writing of the late 1940s and early 1950s on mechanical reproduction and museums, calls Malraux’s “totalizing mode” part of “a moment for grand speculations on art and architecture by Siegfried Giedion, Gyorgy Kepes, Henri Focillon, Joseph Schillinger, and Alexander Dörner, among others.” See Hal Foster, “Archives of Modern Art,” *October* 99 (Winter 2002): 93, note 31.

⁴³ S. Giedion, “Art Means Reality,” *Language of Vision*, 6-7.

⁴⁴ S. I. Hayakawa, “The Revision of Vision,” in *Language of Vision*, 8-10.

In his introduction to the book, Kepes too emphasizes wholeness, integration, and unity. He sees the world as chaotic, and humans as lacking integrity or wholeness. Science and technology have opened new dimensions to humankind, but humankind still believes that “war, economic crises, or psychological disintegration is unavoidable and due to blind, inimical forces of nature.” He writes, “[I]t is our task to establish an organic interconnection of the new frontiers of knowledge. Integration, planning, and form are the key words of all progressive efforts today; the goal is a new vital structure-order, a new form on a social plane, in which all present knowledge and technological possessions may function unhindered as a whole.”⁴⁵ Knowledge alone or experiences alone are not enough. “To function in his fullest scope man must restore the unity of his experiences so that he can register sensory, emotional, and intellectual dimensions of the present in an indivisible whole.”⁴⁶ What can help humankind with this process of reintegration? Kepes believes, “The language of vision, optical communication, is one of the strongest potential means both to reunite man and his knowledge and to re-form man into an integrated being.” A language of vision can convey facts with “the sensory vitality of dynamic imagery.” Far more than a formula for art-making, it is capable of interpreting the new knowledge about the physical and social worlds through “dynamic interrelationships and interpenetration,” qualities this visual language shares with both advanced science and with the contemporary modes of communication, photography, motion pictures, and television.⁴⁷

Kepes believes that this new language is universally understandable and can be comprehended by both the literate and illiterate. This new visual language requires participation of the viewer to comprehend, so the viewer becomes part of a creative process, helping to re-integrate the individual with the world. Technology has reworked the way we perceive space, by actually re-forming spaces we live in or by allowing us to see things that were previously “too small, too fast, too large, or too slow for us to comprehend.” We need to abandon our old, static structures for organizing space, based

⁴⁵ *Language of Vision*, 12.

⁴⁶ *Language of Vision*, 13.

⁴⁷ *Language of Vision*, 13.

on Renaissance perspective, and adopt new, dynamic structures that will also allow for “positive social action.” He writes, “But until today, the symbolic organization of psychological and intellectual conflicts has been limited in its power because it was fastened to a static system of object concepts. Today, the dynamics of social events, and the new vistas of a mobile, physical world, have compelled us to exchange a static iconography for a dynamic one. Visual language thus must absorb the dynamic idioms of the visual imagery to mobilize the creative imagination for positive social action, and direct it toward positive social goals.”⁴⁸ The agenda for a language of vision was highly ambitious. We must see through new eyes, in a dynamic way reorganize our sight and the structures we use to communicate visually, and use these new structures to reform the world. Although the book became a standard art department text, clearly its original purpose was far more utopian.

In order for artists to achieve these ends, Kepes states that today’s creative artists “have three tasks to accomplish if the language of vision is to be made a potent factor in reshaping our lives. They must learn and apply the laws of **plastic organization** needed for the re-establishing of the created image on a healthy basis. They must make terms with contemporary spatial experiences to learn to utilize the **visual representation** of contemporary space-time events. Finally, they must release the reserves of creative imagination and organize them into dynamic idioms, that is, develop a contemporary **dynamic iconography**.” (Kepes’s emphasis.)⁴⁹

Kepes’s three tasks become the equivalent of his three chapters: I. Plastic organization, II. Visual representation, and III. Toward a dynamic iconography. In the “Plastic Organization” chapter, Kepes draws on what he understands about the psychology of optical perception. He focuses on how humans organize such two-dimensional visual stimuli as spots, lines, and shapes. This organization follows certain “laws” such as the law of continuance, which states, “Every linear unit has kinetic inertia. It tends to be continued in the same direction and with the same movement. A straight line tends to be seen in its continuation as a straight line; a curvular [sic] line as a

⁴⁸ *Language of Vision*, 13, 14.

⁴⁹ *Language of Vision*, 14.

curvular line.” He presents ideas of Gestalt psychology, and in this chapter as in his acknowledgements, Kepes recognizes Gestalt psychologists Max Wertheimer, Kurt Koffka, and Wolfgang Köhler. But Kepes does not draw solely on their thinking in his presentation of ideas of optical perception. In this chapter, he also refers to Goethe on optical after-images; Plotinus on symmetry and proportion; anthropologist Frank Boas on rhythmic organization of Peruvian textiles; film pioneers Viking Eggeling and Hans Richter on rhythmic organization; and Percy Goetschius and Paul Hindemith on musical theory. While he does not refer to them by name, his presentation of ideas about the psychology of attention recalls the work of psychologists Wilhelm Wundt and Edward Bradford Titchener, Wundt’s student and literary translator.

Although Kepes refers to laws of organization in this chapter, his call for a “structure-order” is not utterly deterministic but ultimately has an open-ended quality. He says, “The plastic image is an organism that reaches out to the dimensions of understanding beyond the sensory radius. The fascination of a sunset or a sunrise, the irresistible interest aroused by the ever-changing shapes and colors of flames, or the rhythmical patterns and reflections of waves on the water, have a revealing meaning. We never tire of these optical transformations which, in spite of all variations, retain their unity. . . . From the perception of sensory patterns, one moves to corresponding structures in emotional and intellectual realms. The experience becomes complete.”⁵⁰ Kepes told the interviewer Robert Brown that the Plastic Organization chapter “deals with the restructuring principles, [how] to see, not how to learn, but [how] to structure whatever impacts one gets from the heart’s side.”⁵¹ For Kepes, structure reveals meaning.

The idea of “structural laws” for Kepes was an overarching concept that included grasping qualities of perception and ordering of vision through the viewer’s essential role in actively shaping wholes from formlessness. As he said in *The Language of Vision*, “To perceive a visual image implies the beholder’s participation in a process of organization. The experience of an image is thus a creative act of integration. Its essential characteristic

⁵⁰ *Language of Vision*, 44.

⁵¹ Kepes interview by Brown transcript, 21. Note that the transcriber typed “hard” but it seems more likely Kepes said “how.”

is that by plastic power an experience is formed into an organic whole. Here is a basic discipline of forming, that is, thinking in terms of structure, a discipline of utmost importance in the chaos of our formless world.”⁵² He sought to define a structure of perception that would partake of a larger order and give meaning to the world.

Chapter 2, called “Visual Representation,” makes up the largest part of the book. In it Kepes deals with past conventions of seeing and of transcribing the seen and calls for a deeper understanding of modern visual experience, with corresponding new forms of representation. For Kepes, in humankind’s struggle for survival, nature must be controlled through both mind and senses, including vision. He expresses a utopian belief in the power of both the “thinking process” and in “sensory comprehension,” in particular a development of vision to effect human progress. The artist must translate physical experiences of the modern, technologically complex world into two-dimensional representation “by means of a sign system based upon a correspondence between the sensory stimulations and the visible structures of the physical world. . . . The goal is a visual representation in which the most advanced knowledge of space is synchronized with the nature of the plastic experience. Space-time is order, and the image is an ‘orderer.’ Only the integration of these two aspects of order can make the language of vision what it should be: a vital weapon of progress.”⁵³

In a roughly chronological format he explains visual conventions from the past and from other cultures, then he reevaluates these in modern terms. For example, hierarchy of scale, in which artists showed figures with a direct correspondence of their importance to their sizes—kings were shown as larger than lesser humans, regardless of how a scene would appear optically—was eliminated during the Renaissance. Renaissance artists substituted linear perspective in order to show how the world looks from a fixed point of view at a single moment in time. In the twentieth century, artists (particularly commercial artists and filmmakers) began to use scale and show space in ways which were free from the conventions of linear perspective in order to bring a new dynamism to their work. In print advertising, “the page has its own spatial world, not in a

⁵² *Language of Vision*, 13.

⁵³ *Language of Vision*, 66-68.

naturalistic sense as an illusion of actual distances between the represented elements, but in the sense that in it the size of picture and word are in a plastic and meaningful connection.”⁵⁴

Kepes stated that the ideas in this chapter were not utterly original. “I didn’t add anything particularly new to it, but I tried to tell what the Cubists say, what the Constructivists and others were saying.”⁵⁵ Many twentieth-century artists shared the struggle to handle modern perceptions, and they were convinced that to do so successfully would result in human progress.

The third and last chapter, “Toward a Dynamic Iconography,” was for Kepes his most original contribution, and as he would say in an interview later, it was the section he would liked to have developed further. Here Kepes sees a parallel between the disintegration of visual conventions such as linear perspective and the disintegration of fixed systems of meaning once supported by now-crumbled visual conventions. The reintegration of a new system of meaning to establish values concerns him. Values for Kepes are “the recognized directives toward a more satisfactory human life. They are the comprehended potential ‘order’ in man’s relationship to nature and to his fellow man.”⁵⁶

Yet the modern age has not yet developed values and therefore order. “We are living in a formless age of transition, of chaos, incomparable to anything man has ever experienced before,” he writes. “In this confusion, plastic art, the most direct experience of order, the forming activity par excellence, gains significance.”⁵⁷ It will be the task of artists to “liberate the inexhaustible energy reservoir of the visual associations” in order to create a dynamic new system whereby to order the world. In building up this new system of meanings, Kepes relies on an understanding of association of disparate ideas that must be held in balanced tension to form a coherent whole. “As one searches for spatial order, and through the interrelationships of the plastic forces creates a unified

⁵⁴ *Language of Vision*, 71.

⁵⁵ Kepes interview by Brown transcript, 21.

⁵⁶ *Language of Vision*, 201.

⁵⁷ *Language of Vision*, 201.

spatial whole one also searches for a meaning-order and builds from the different association-directions the common, meaningful whole.”⁵⁸

This idea of association holds that varied elements may share something in common, but more than likely they have no overtly logical relationship and therefore force a viewer to resolve this tension of unrelated parts into a meaningful configuration. Kepes finds this revolutionary practice in collage, photomontage, film, and advertising art. “Advertising art pioneered in testing representational images in combination with pure plastic units and verbal elements.”⁵⁹ This concept reflects the psychological idea of associationism, used in early advertising. The “dynamic participation of the beholder” is necessary to bring into balance the tensions of disparate elements. The effort of reconciling associated elements, related or unrelated, requires both the mind and the senses, and this effort has the potential to make our thinking minds and sensing bodies progress toward “the new discipline necessary to the dynamics of contemporary life.”⁶⁰ To sum up Kepes’s belief: Participation of mind and body in associating disparate elements into a meaningful, dynamic balance will afford the discipline to move individuals and society progressively forward.

Advertising art has been in the forefront of the development of this potentially beneficial new vision, according to Kepes, because of its freedom from tradition and because of its need to fully engage the machine age through explaining and promoting its products. The photomontage, in particular, was advertising’s response to the need to show the simultaneous, interconnected functions of machinery which “naturalistic photography” was incapable of doing. “[L]ong before painters began to attack the problem, advertising in this country was already making use of the photomontage. . . . [I]n the photomontage that connectedness was dictated by the functional, meaningful relationships of the represented object-elements.”⁶¹ But more than a combination of

⁵⁸ *Language of Vision*, 202.

⁵⁹ *Language of Vision*, 207.

⁶⁰ *Language of Vision*, 209.

⁶¹ *Language of Vision*, 219, 221.

photographic elements distinguishes advertising's use of a modern visual language. "To put an advertising message through effectively, the most heterogeneous elements—verbal message, drawing, photography and abstract shapes—were employed."⁶² Advertising had to attract viewers to be effective, so this new organization of disparate elements had to be visually appealing. Because advertising art had so successfully devised and mastered a modern visual structure which supported new meanings, Kepes saw it as full of potential to function as the flagship for a flotilla of more socially useful vessels of art. Kepes has been challenged over his seeming support of capitalist advertising, and he himself wrote to his colleague and former student Robert Preusser of his reluctance to work in the advertising world.⁶³ We should remember, however, that it was not the content of ads which he celebrated, but advertising's advanced mastery (over other mediums such as painting) of a modern "language" which, in a democratic, non-elitist way, reached out to the masses.

The structure of the book was itself intended to demonstrate Kepes's dynamic iconography. "I feel that the vehicle that carries the message has to be of the same basic substance as the message itself. . . . [Y]ou have to make the book itself a message in itself."⁶⁴ Kepes used a wide variety of images in his layouts for *Language of Vision*. Although he identified the artists, titles, and sources for the artwork he reproduced, he did not provide figure numbers for the images and so did not systematically connect images directly to text. He rarely made specific reference to particular images accompanying the text. Thus he forced the viewer to make connections between the visual and the verbal in

⁶² *Language of Vision*, 221.

⁶³ Kepes wrote Robert Preusser around the time that he was considering leaving the School of Design in 1943. "Juliet started to stick her neck out at the business field, making some advertising designs. I hope she will learn fast all the tricks necessary and better then [sic] I was able to do. Advertising field is not the most pleasant [sic] territory of human endeavours but there are still worst [sic] thing we need to stomach in order to survive. If I can not get a reasonable teaching job in the next future then Juliet and I shall try to concentrate on commercial work to keep us above water until some better chances are coming." Letter to Bob Preusser from Kepes, n.d., 1943 based on internal evidence, University of Chicago University Library Special Collections, Institute of Design Collection, box 7, folder 196.

⁶⁴ Kepes interview with Brown transcript, 24.

exactly the way that he was explicating through his text. Throughout its publication history, some critics understood this choice of format, while others have failed to understand and have criticized the lack of captions or other textual references to the images reproduced. Kepes explained, “I tried to show the image, as always, not as illustrations of principles, but as the building materials of principles.”⁶⁵

The publication history of *Language of Vision* gives an idea of the intended audience, and demonstrates its longstanding value to publishers and readers. It also reveals the members of the art world whom Kepes involved (or attempted to involve) in its production because he felt their ideas were compatible to his. Not long after arriving in Chicago, he made the acquaintance of Paul and Lola (Lolita) Theobald, owners of a gallery and bookstore specializing in books on art. The circle of German-born Paul Theobald and Mexican-born Lola included Moholy-Nagy, Gropius, and other European immigrants connected to the arts, and the Theobalds published works by these and others. According to Victor Margolin, who interviewed Lola Theobald in 1980 and 1981, Paul Theobald had wanted to publish books and suggested to Kepes in 1938 that he put together a book on graphic design. Margolin writes, “Kepes agreed and told Theobald that, in fact, he had been collecting material for about eight years,” which would put the genesis of the work in Kepes’s time in Berlin during the early 1930s, long before he began to teach.⁶⁶ Kepes’s *Language of Vision* became the second book published by the Theobalds.

The book was an immediate success: its three thousand copies printed in 1944 sold out by March 1945. Theobald planned to reprint the book in July 1945.⁶⁷ Unfortunately, misunderstandings cropped up concerning Kepes’s requests for changes to

⁶⁵ Kepes interview by Brown transcript, 21.

⁶⁶ Victor Margolin, “Paul Theobald & Company: Publisher with a New Vision,” *Printing History: The Journal of the American Printing History Association* 9 no. 2 (1987): 34-35. Kepes himself said his students encouraged him to publish his lectures in book form, and suggested a publisher. See Kepes interview with Brown transcript, 20.

⁶⁷ Letter to Kepes from Theobald, June 11, 1945. Art Institute of Chicago Ryerson and Burnham Archives, Paul Theobald and Company Records Box 3 Folder 28.

the book at the time of reprinting.⁶⁸ But a reprinting typically does not include any changes, which would have constituted a new edition at greater expense, as Theobald tried to explain. Theobald was open to the idea of a new edition, but he also pointed out to Kepes the difficulties that wartime paper shortages presented to publishers. The popularity of the book as well as wartime obstacles are evident in Theobald's comment: "It made me sick the other day looking through the mountains of orders we are holding for the book. I am convinced that with the efforts we made the sales would have easily reached 15-25 thousand copies for L of V."⁶⁹ The book was printed a third time on January 25, 1947.⁷⁰

By November 1973, *Language of Vision* had had thirteen printings. In 1995 Dover Publications, Inc., republished the 1944 Theobald edition. Concerning the publication history of *Language of Vision*, Kepes told the interviewer Robert Brown in

⁶⁸ In 1946, Kepes expressed his wish to add pages for a name index, as he had received criticism that this lack made the book unsuitable for use as a text. He also wanted to add a section to explain his terminology, and objected to the blue binding with silver stamping and wanted it changed. He asked to have his biographical information on the jacket updated to show his new position as professor at M.I.T. Letters to Paul Theobald from Kepes, Mar. 9 and Mar. 17, 1946, and Oct. 14, 1946. Art Institute of Chicago Ryerson and Burnham Archives, Theobald Company records Box 3 Folder 28.

⁶⁹ Letter from Theobald to Kepes, Oct. 23, 1946. Art Institute of Chicago Ryerson and Burnham Archives, Theobald Records Box 3 Folder 28. Theobald expressed interest in publishing a book by Kepes on his teaching methods, expecting that the new book would be as popular as *Language of Vision*. He wanted to discuss a French language translation of *Language of Vision* with Kepes. But the relationship between Kepes and Theobald continued to deteriorate, exacerbated by the positive reception of *Language of Vision* and possibly by Kepes's growing stature. Kepes by 1946 had a position at M.I.T., and wished to publish books with M.I.T. Press. His contract with Theobald, however, gave Theobald the right of first refusal for the next three of Kepes's books. By February 1947, Theobald had learned that Kepes had submitted a manuscript to "a Boston publisher," and hired a lawyer to protect his contract. The litigation continued for years. In 1956, Theobald finally published Kepes's second book, *New Landscape in Art and Science*. In the acknowledgements, Kepes expressed regret that the book was not published by M.I.T., and also thanks the Theobalds for their "tenacity and vision in bringing the book to life." Gyorgy Kepes, *The New Landscape in Art and Science* (Chicago: Theobald and Co., 1956), 9-11.

⁷⁰ Letter from Theobald to Kepes, May 26, 1947. Art Institute of Chicago Ryerson Archives, Theobald and Company records Box 3 Folder 28.

1973 that the book had sold at least sixty thousand copies (a large number for an art book), had been translated into many languages, and was available in Italy, Mexico, Argentina and Germany. He said, “The book had a tremendous success. Not alone for its value, I don’t want to say anything about that myself, but there were in this country no exacting books which dealt in twentieth century idioms.”⁷¹

Kepes’s observation about a lack of books like *Language of Vision* may seem to be a sweeping claim, but briefly establishing the fluid context of commercial art education and practice as it developed during the early twentieth century will help to affirm his statement. As Michelle H. Bogart has shown, late nineteenth- and early twentieth-century illustrators, the most prominent practitioners of commercial art, usually received academic art training at such schools as the Art Students League, the Pennsylvania Academy of Fine Arts, or the Art Institute of Chicago. They were expected to master drawing and painting, then later, if they chose, apply their skills to commercial illustration. On-the-job training provided further skills. In a 1922 essay, the illustrator, typographer, and book designer William Addison Dwiggins (1880-1957) introduced the term “graphic design” to describe work that had earlier been known as commercial art or advertising design.⁷² By the late 1920s, graphic designers had begun to establish their field as a profession, and photographers asserted their work over illustration for purposes of advertising.⁷³

Books directed to designers often consisted of page specimens and explanations of how to achieve good page design. While many American publications treated *art déco*-inspired advertising styles, few books addressed larger, more serious issues raised by

⁷¹ Robert Brown interview with Gyorgy Kepes for Archives of American Art, Smithsonian Institution, Jan. 11, 1973.

⁷² W. A. Dwiggins, “New Kind of Printing Calls for New Design,” in Michael Bierut, Jessica Helfand, Steven Heller, and Rick Poyner, eds., *Looking Closer 3: Classic writings on Graphic Design* (New York: Allworth, 1999), 14-18. Originally printed in the Boston Evening Transcript (29 August 1922).

⁷³ Ellen Mazur Thomson, “Early Graphic Design Periodicals in America,” *Journal of Design History* 7, no. 2 (1994): 113-26; Michelle H. Bogart, *Artists, Advertising and the Borders of Art* (Chicago: The University of Chicago Press, 1995), 26-31, 196-204, 296-97.

modernism in relation to graphic design. Examples of these books include type designer Douglas C. McMurtrie's *Modern Typography and Layout* (1929) and Dwiggins's *Layout in Advertising* (1928).⁷⁴ Robin Kinross describes McMurtrie's book as "an early, stray treatment of the subject from the English language world."⁷⁵

By the 1930s, some advanced graphic designers like Chicago-based Lester Beall developed designs that included dynamic blends of photomontage, text, graphic elements, and illustration, pushing their work beyond simple applications of *art déco* style. Beall's experiences demonstrate that even the best academic and art education available in a major American city did not include exposure to publications that addressed the most advanced art developments of the twentieth century. Beall had to discover this approach on his own, in spite of the fact that he had earned a degree in art history from the University of Chicago in 1926 and had taken courses in drawing and painting at the Art Institute of Chicago. While he struggled to establish himself as a professional illustrator, he used Art Directors Club of New York annuals to provide models for advertisements. But the eye-opening experiences that helped him develop his advanced approach to graphic design were not found in his art education or in American examples. During the early 1930s, Beall first discovered European avant-garde art at Kroch's Book Store in Chicago. His exploration of publications at the Ryerson Library of the Art Institute of Chicago revealed to him things that were utterly new to him. He recalled, "I suddenly became aware of a part of the art world that was totally unfamiliar." He began building his own library of mostly European art books, which he expanded through his contact with Paul Theobald, head of Kroch's art book department and later publisher of

⁷⁴ Douglas C. McMurtrie, *Modern Typography and Layout* (Chicago: Eyncourt Press, 1929); William Addison Dwiggins, *Layout in Advertising* (New York: Harper, 1928).

⁷⁵ Robin Kinross, intro. in Jan Tschichold, *The New Typography: A Handbook for Modern Designers* trans. Ruari McLean (Berkeley: University of California Press, 1987), xxxvi, originally published as *Die neue Typographie: Ein Handbuch für Zeitgemäss Schaffende* (Berlin: Educational Alliance of German Printers, 1928).

Language of Vision.⁷⁶ Kepes included several examples of Beall's advertisement designs in *Language of Vision*.⁷⁷ The fact that both Beall and Kepes were friends of Theobald, whose expertise was in art publications and who would have presented them with the most forward-looking publications available, further supports Kepes's claim that until the publication of *Language of Vision*, no American books treated graphic design in terms of "twentieth-century idioms."

Many reviewers of *Language of Vision* recommended it as an important general-interest book on art, one that provided a unique approach. A reviewer writing in *Architectural Forum* placed the book in "the no-man's-land between such highly specialized works as Dr. Lukiesh's *Light, Seeing and Vision* [sic] . . . and the Museum of Modern Art's excellent works on contemporary painting and photography." Matthew Luckiesh, a physicist and director of General Electric's Lighting Research Laboratory in East Cleveland, Ohio, had written a number of books on light, lighting design, color, visual illusions, and the physiology of seeing. His *Language of Color* (1918) urged a correlation between the sciences and arts as it explored the psychological effects of color in the arts, as well as color symbolism and nomenclature. Other books on light similarly targeted professionals in the visual and dramatic arts and architecture. His 1944 book, actually titled *Light, Vision and Seeing*, built upon Luckiesh's earlier researches, but its focus was the use of artificial light for greater visibility, safe vision, and eye health. As such, it was more specialized and might indeed appear distant from art museum publications, the "no-man's land" in between seeming an odd place for a book directed at practicing graphic designers to find itself.⁷⁸ The first reviews appeared in the architecture

⁷⁶ R. Roger Remington, *Lester Beall: Trailblazer of American Design* (New York: W. W. Norton, 1996), 21-33. Some of the publications Beall read were European journals *Formes*; *Arts et Métiers Graphiques*; and *Cahiers d'Art*.

⁷⁷ *Language of Vision*, 41, 125, 131, 142.

⁷⁸ Anon., review of *Language of Vision*, *Architectural Forum*, 82 (June 1945): 152, 154. Some other reviews are Davidson-Smull, "Not a Simple Problem," *Pencil Points* 26 (Nov. 1945):110-112; anon., review of *Language of Vision* in *Architectural Forum* 82 (June 1945):152, 154; "The Language of Vision." Book review. *Journal of the Royal Institute of British Architects* 53 (July 1946): 416, 417. Anon., "Principles of Composition," *Times Literary Supplement*, Fri., Sept. 14, 1951, 576 is the lone negative review of which I am aware.

journals *Arts and Architecture*, *Architectural Forum*, and *Pencil Points* in the year after the book's publication, even though Kepes was neither an architect nor did he primarily address architects in his book. Perhaps Sigfried Giedion's contribution of an introductory essay gained the book notice by these journals. On the other hand, Theobald's refusal to provide free review copies of the book clearly limited its coverage in other journals.⁷⁹

Reviewers held the strongest objections to what they saw as Kepes's elevation of advertising. In *Arts and Architecture*, post-surrealist painter Grace Clements provides a discerning and cogent critique of the book, as well as a stern warning about the contributions of advertising and the capitalism it supports to the dire state of the modern world. She writes:

Although Kepes' discussion of advertising in art is in itself positive and fruitful, it is doubtful that his conclusions are altogether justified. Whereas he has seen in the lack of restrictive tradition in the commercial field the logical area for the development and use of a dynamic iconography—and it has indeed been in this realm where a fusion of the most diverse elements has undoubtedly demonstrated the vitality of the new plastic idiom—Mr. Kepes seems to have overlooked the most salient feature of advertising art: its relationship to modern industry and the capitalist structure. The revolution in art is only a part of a necessary and more fundamental revolution in all spheres of human endeavor. Kepes is well aware of the fact that war, economic crisis, and psychological disintegration is the result of deep contradictions in our social existence. His intrinsic honesty should lead him to the recognition that their resolution cannot come through a major factor contributing to those contradictions.⁸⁰

Under editor John Entenza, *Arts and Architecture* had become an avant-garde magazine targeting both a professional and lay audience. Clements' review reflects the serious social commitment the California-based publication was also known for in the 1940s and 1950s.⁸¹

⁷⁹ Letter from Kepes to Theobald, March 9, 1945. Art Institute of Chicago Ryerson and Burnham Archives, Theobald Records Box 3 Folder 28. This letter indicates that Kepes made appointments with editors of *The Magazine of Art*, *Time*, *Minicam*, and other magazines, but because Theobald would not provide free copies to give to the editors Kepes felt he had to postpone or cancel these meetings.

⁸⁰ Grace Clements, "The Language of Vision," *Arts & Architecture* 62 (Apr. 1945): 30-31, 50.

⁸¹ Charlotte Streifer Rubinstein, *American Women Artists from Early Indian Times to the Present* (Boston: G. K. Hall, 1982), 253; *Who Was Who in American Art*.

British-born painter and experimental printmaker Stanley William Hayter, who had moved his famous Atelier 17 workshop from Paris to New York at the outbreak of World War II, reviewed Kepes's book for the *Magazine of Art*. He praised the book as "serious and well-written" but, like Clements, rejected Kepes's situating advertising art ahead of easel art. Associated with members of the avant-garde, including then-exiled surrealists like André Masson and emerging abstract expressionists like Jackson Pollock and Robert Motherwell, Hayter famously promoted abstraction, automatism, and technical experimentation in the creation of original prints. He was revitalizing printmaking, seeking to liberate the process from the status of commercial craft to independent aesthetic object. His success may be judged by his 1944 exhibition at New York's Museum of Modern Art. Hayter's work was antithetical to commercial art. Thus, concerning the *Language of Vision*, he wrote, "Kepes wrongly elevates advertising art, which he fails to see simply reuses high art from twenty-five years earlier." He ended his review saying, "This is perhaps the only work on the subject of vision current at the moment that makes sense; but we must still warn the reader to distinguish carefully between the language of vision and the dialect of salesmanship."⁸²

In an essay in *Journal of Aesthetics and Art Criticism* of 1947, William Sener Rusk approached the book not as a general interest art book, nor a design how-to, but as critical theory. Rusk applied to architecture and sculpture Kepes' three main principles of the *Language of Vision*: learn and apply laws of plastic organization to re-establish the created image, utilize visual representation of modern space-time events, and develop a

Compiled from the Original Thirty-Four Volumes of American Art Annual: Who's Who in Art: Biographies of American Artists Active from 1898-1947, ed. Peter Hastings Falk (Madison, Conn.: Soundview Press, 1985), 118. David Travers, "About Arts and Architecture," <http://www.artsandarchitecturemag.com>, last updated January 2007, accessed April 10, 2010.

⁸² S. W. Hayter, "The Language of Vision," *Magazine of Art* 39 (April 1946): 156-7.

dynamic iconography.⁸³ With some modification of terms (changing “two dimensional surface” to “form” for sculpture and “construction-in-space” for architecture), Rusk felt he successfully analyzed Wright’s Fallingwater, and William Zorach’s *Mother and Child* and *Torso* in terms of this new language. As a check, he also briefly analyzed Marin’s *Sunset* in these terms. Rusk wrote, “The speaker who uses the language of vision as suggested in Kepes’ grammar is, I believe, able to express himself to his generation more clearly and significantly than if he attempts merely to modernize the language of the Renaissance. The exceptional in Renaissance form here becomes the usual, time and space are integrated with objectivity and plastic forms grow dynamic.”⁸⁴

Rusk clearly showed that he understood Kepes’s book as revised structure for seeing and communicating. Although he makes no mention of advertising art, Rusk was aware that the book was directed to practitioners in two-dimensional media, not sculpture or architecture. He was not alone in feeling that *Language of Vision* was amenable to three-dimensions. Others believed so too, and also began to find instructional value in the book. By the late 1940s, the audience for *Language of Vision* had shifted from its intended group, general readers and working designers and artists, to students in college art and architecture programs. The book became a standard art education text.

We can get an idea of the book’s importance for art education from Frederick Logan who in *Growth of Art in American Schools* called *Language of Vision* “the most influential single volume in art education in the 1940s and 1950s.”⁸⁵ In 1961, Neal B. Mitchell, Jr. wrote an article in the *Journal of Architectural Education* proposing a new four-year course of study for architecture, emphasizing a visual approach to “excite the students with the possibilities and romance of structure.” *Language of Vision* was listed as background reading for Year 1, Semester 1, along with Moholy-Nagy’s *Vision in Motion* and other books. About *Language of Vision* and *Vision in Motion*, he writes,

⁸³ *Language of Vision*, 14.

⁸⁴ William Sener Rusk, “Some Applications of Kepes’ *Language of Vision*,” *The Journal of Aesthetics and Art Criticism* 5, no. 3 (1947): 204-206.

⁸⁵ Frederick Logan, *Growth of Art in American Schools* (New York: Harper, 1955), 255-63.

“Both of these books are important. Many people have already used them as an aid in design courses.”⁸⁶

In “Art Education for Secondary Schools: A Selected Bibliography,” published in *Art Education* in 1959 and updated in 1963, Kepes’s *Language of Vision* was listed under the heading General Books on Art, along with such other major works as John Dewey’s *Art as Experience*, Sheldon Cheney’s, *Story of Modern Art*, Heinrich Wölfflin’s, *Principles of Art History*, Suzanne Langer’s *Philosophy in a New Key*, and Laszlo Moholy-Nagy’s *The New Vision* and *Vision in Motion*.⁸⁷ In 2009 *Language of Vision* still appears on art department reading lists, such as on a supplemental reading list for Mina Cheon’s course Elements of Visual Thinking at Maryland Institute College of Art, and on the reading list for the Foundations Program at the School of Art of Northern Illinois University.⁸⁸

As a pedagogical work, *Language of Vision* is related to particular books of the Bauhaus series (*Bauhausbücher*) by Wassily Kandinsky, Paul Klee, Piet Mondrian, Moholy-Nagy, and Walter Gropius. Kepes, as has been noted, never attended the Bauhaus, and his association with Moholy-Nagy began years after Moholy-Nagy left the school, yet, as I indicate in chapter three, Kepes was aware of these Bauhaus publications by 1925. He included illustrations of the work of all of these artists in his book.⁸⁹ Certain

⁸⁶ Neal B. Mitchell, Jr. “A Proposal for a Sequence of Structure Courses,” *Journal of Architectural Education* 15, no. 4 (Winter 1961): 29-32. Also appearing on Mitchell’s list are D’Arcy W. Thompson’s *On Growth and Form* (1917), Lancelot L. Whyte’s *Aspects of Form* (1951), Eduardo Torroja’s *Philosophy of Structures* (1958), L. Michaels’s *Contemporary Structure in Architecture* (1950), and Ahmed Raafat’s *Reinforced Concrete in Architecture* (1958).

⁸⁷ “Art Education for Secondary Schools: A Selected Bibliography,” *Art Education* 12 no. 8 (Nov. 1959): 6-9. “Art Education for Secondary Schools: A Selected Bibliography,” *Art Education* 16 no. 8 (Nov. 1963): 22-25.

⁸⁸ Email from Mina Cheon to the writer, June 8, 2009. *Language of Vision* is used as a resource for a group project on “formal vocabularies in visual art.” <http://digital.mica.edu/mcheon/ELEMENTS/SYLLABUS.html>. Accessed June 8, 2009. School of Art, Northern Illinois University, see <http://www.niu.edu/art/foundations/site/Reding%20List.htm>. Accessed June 8, 2009.

⁸⁹ In *Language of Vision* works by Mondrian are on pages 42 and 47. Works by Moholy-Nagy are on pages 50, 79, 91, 116, 149, 157, 159, 160, and 218. A diagram by

facets of these artists' pedagogy were absorbed by Kepes, although he, unlike they, emphasized in his approach the development of structured seeing through commercial art.

In *Point and Line to Plane*, published in 1926 as number nine in the Bauhaus books series, Kandinsky discusses art not only in terms of language or grammar, but also in terms of music, sounds, and (for certain art elements) in terms of temperature.⁹⁰ He tries to determine the inherent meanings of simple art elements: points are “silent,” horizontal lines are “cold,” diagonal lines are the equivalent of “colorful” colors (yellow and blue). These art elements (and all the many others he discusses) do not function as signs of anything but are the embodiments of spiritual meanings. In his insistence on the distilled meanings of art forms, and even on the inherent spiritual nature and life of these forms, Kandinsky hews to Symbolist principles.

In spite of his rather poetic approach, Kandinsky delineates a research-based “new science—the science of art.” This research must start with the most “basic elements” of art which he analyzes with excruciating care in a “scientific” way. He starts with the point, and moves to the line, then the picture plane. He develops interrelationships between these, and derives certain principles. He believed that the laws that art elements follow are similar to the laws followed by other arts. These elements could be analyzed, compared and correlated, within and across disciplines, eventually building one unified system of meaning for all arts. He wrote,

This abstract, logical structure peculiar to one form of art, which finds in this art a constant, more or less conscious application, can be compared to the logical structure found in nature, and both cases—art and nature—offer the inner man a quite special kind of satisfaction. The other arts, too, most certainly possess at bottom the same abstract, logical structure. In sculpture and architecture the element of space, in music the element of sound, in dance the element of movement, and in poetry the element of words—all these elements demand to be

Kandinsky appears on page 22. It is a reproduction of “9 points in ascent” from Kandinsky's *Point and Line to Plane* (New York: Dover, 1979), 151.

⁹⁰ Wassily Kandinsky, *Point and Line to Plane* in *Complete Writings on Art*, ed. by Kenneth C. Lindsay and Peter Vergo. n. p.: Da Capo Press, 1994. Originally published in as *Point and Line to Plane: A Contribution to the Analysis of Pictorial Elements* (Munich: Albert Langen, 1926).

similarly sifted and summarily juxtaposed, with reference to their external and internal qualities, which I call sounds.⁹¹

Kepes did not focus on analysis of art elements and a gradual building of a system from them. He was concerned with vision or perception, and the need to retrain the eye in a holistic way.

Kandinsky expected that these elements would one day be gathered in a “dictionary,” then a “grammar,” and eventually will make up a living “language.” He writes, “The progress achieved by systematic research will give birth to a dictionary of elements that, developed further, will lead to a ‘grammar,’ and finally to a theory of composition that will overstep the boundaries of the individual arts and refer to ‘Art’ in general.”⁹² Like Kandinsky, Kepes found the idea of language as a structure a useful concept, and was interested in ordering art and life systematically. But Kandinsky’s system, a grammar of art and eventually a theory of composition for all the arts, conveys an art message—deeper truths of a spiritual nature. Kepes’s is a language of vision applicable to all society or culture, not meant to convey spiritual truths as much as to achieve an improved, integrated society.

Kandinsky and Paul Klee taught *Formlehre* (studies of form), part of the Basic Course, and other courses at the Bauhaus. They were in agreement with the Bauhaus call to unite art, science, and industry, and were interested in promoting the creative process. Klee, like Kandinsky, analyzed art elements, discussed the science of visual perception, and emphasized his response to the optical sensations of the visible natural world. Klee’s *Pädagogisches Skizzenbuch* appeared in 1925 as the second publication in the Bauhaus book series. It was edited by Gropius and Moholy-Nagy and designed by Moholy-Nagy. (Sibyl Moholy-Nagy published her English translation of this book in 1944, the same year *Language of Vision* appeared. She and Kepes would have been working on their projects simultaneously at the School of Design.)

Heavy with diagrams, the book is divided into four sections. Section I takes a line for a “walk,” moving points through space and thereby forming lines and planes of

⁹¹ Kandinsky, *Point and Line to Plane*, 600-1.

⁹² Kandinsky, *Point and Line to Plane*, 602.

various characters. This section deals with “structure” in the form of simple repetition of a unit and increases the complexity of structure, using the idea of the Golden Section and examples of waterwheel and hammer, plants reproduction, and the circulatory system. Section II deals with considerations of three-dimensionality on a two-dimensional surface. Section III deals with effects of gravity on objects. Section IIII deals with objects in motion, and the dynamism of color.⁹³

Klee mentions “non-symmetrical balance” and alludes to “structure” in terms of arithmetic patterns or references to muscles and bones. Kepes was in accord with Klee’s ideas about the importance of structure, but his emphasis on a language-like structure for ordering vision with a role for commercial art is not shared by Klee.

Norbert Schmitz in essay in Fiedler’s *Bauhaus* points out that Klee and Kandinsky were closely connected with the nineteenth-century romantic view of art. In spite of their highly systematic ways of teaching the fundamentals of art (Kandinsky’s was geometric, Klee’s more concerned with growth in nature), their own work did not necessarily partake of their systems, and they reserved for themselves inspiration and intuition in the tradition of nineteenth-century masters.⁹⁴

Moholy-Nagy’s views on New Vision photography and art were a large reason that Kepes moved from Budapest to Berlin join him in his work. Kepes must have encountered Moholy-Nagy’s *Malerie, Photographie, Film* in either the 1925 or the 1927 editions during his student days in Budapest, when he was mentored by Moholy-Nagy’s colleague Lajos Kassák.⁹⁵ This book, however, was not of a pedagogical nature. Moholy-Nagy’s pedagogical works all flowed from his book *Von Material zu Architektur* (later published in English as *The New Vision*), based on his lectures at the Bauhaus between

⁹³ Paul Klee, *Pedagogical Sketch Book* (New York: The Nierendorf Gallery, 1944), trans. by Sibyl Peech [pseud. for Sibyl Moholy-Nagy].

⁹⁴ Norbert M. Schmitz, “Teaching by Wassily Kandinsky and Paul Klee,” 382-391 in Jeannine Fiedler and Peter Feierabend, eds. *Bauhaus*. Cologne: Könemann, 1999.

⁹⁵ László Moholy-Nagy, *Malerei, Photographie, Film* (Munich: A. Langen, 1925). The 1927 edition uses the modern spelling “Fotographie.”

1923 and 1928 and first published in 1929.⁹⁶ Kepes would have known this book from his direct association with Moholy-Nagy in Europe and the United States.

In this book, Moholy-Nagy calls on artists to shift their thinking from a prescribed canon into something new: organic function achieved by a scientific understanding of how humans interact with their environments. He then calls for a systematic study not just of this “physiological experience,” but also of “sensory-reactive (psychophysical) effects” by which he means how sights or colors affect people psychologically. He speaks of welding elements into a synthesis. He admits that the effects of, say, a particular color on a human can change as the shape, position, or repetition of a color changes; but he hopes that by studying “basic elements of expression” more will be understood about how these work in combination. Sounding like his fellow Bauhaus teacher Kandinsky, he wrote, “The scope of such a study is to survey and organize all the utilizable elements of expression. This study of the basic elements may then play the role of a well-stocked chest of tools, or of a dictionary, but it cannot give security to the creative work itself.”⁹⁷ He then attempts a brief “framework of systematization of the elements of artistic creation” in two main parts: “forms already known” and “newly produced forms” with a list of possible relationships, such as contrasts and mirroring.⁹⁸

A revision and expansion of *The New Vision* called *Vision in Motion*, which included Moholy-Nagy’s New Bauhaus/School of Design/Institute of Design pedagogy, appeared following Moholy-Nagy’s death in 1946, and after the publication of *Language of Vision*.⁹⁹ In this book, familiar to Kepes, he “concentrates on the work of the Institute of Design, Chicago, and presents a broader, more general view of the interrelatedness of

⁹⁶ László Moholy-Nagy, *Von Material zu Architektur* (Munich: A. Langen, 1929). A revised English edition titled *The New Vision* was published in New York in 1932 and 1938. In 1947 it was reissued with the addition of the essay “Abstract of an Artist.” The third version is *The New Vision, 1928; and, Abstract of an Artist*, 3rd rev. ed., New York: G. Wittenborn, Inc., 1946. The publication date of 1930 given on page 6 for the English edition of *The New Vision* has been corrected in WorldCat to 1932.

⁹⁷ Moholy-Nagy, *The New Vision*, 53, 54.

⁹⁸ Moholy-Nagy, *The New Vision*, 54, 55.

⁹⁹ Laszló Moholy-Nagy, *Vision in Motion* (Chicago: Paul Theobald, 1947).

art and life.”¹⁰⁰ Here, undoubtedly due to his contact in Chicago with Kepes and guest lecturers such as the semiotician Charles Morris and semanticist S. I. Hayakawa, Moholy-Nagy briefly builds on the idea of an art language he had first tried to work out in the 1920s. Moholy-Nagy locates the source of this language within each individual, but here he does not attempt to posit an overarching visual system. For Moholy-Nagy, the arts can participate in moving humanity toward a “harmonious social existence” by a “re-education of the people” through direct sensory exposure to new imagery, “without involving too much intellectual participation.” He writes, “This new imagery is the essence of the manifold potentialities of this yet-chaotic world translated into a language of directness and intensity. . . . It has to be said again and again that every healthy person has deep within him the biological capacity for developing such a language. Everyone has a creative nature.”¹⁰¹ Moholy-Nagy quickly drops ideas of visual language and shifts to his more typical theme of the universality of creative abilities.¹⁰²

Towards the end of the book, Moholy-Nagy again reveals his acquaintance with the General Semantics movement through Hayakawa. He writes,

Depending upon their previous experience and knowledge, some onlookers have a predetermined expectation of “art,” a signal reaction, as the general semantists [*sic*] put it. They do not realize that the great painter communicates with nothing else but the common language of art based upon visual fundamentals. They do not realize that the personal ways of using and interpreting these elements constitute the idiom of the artist and that such an idiom usually has a simple system by which understanding of a work of art can be brought about. When such systems are explained and made transparent, much of the spirit at work can be recaptured. However, it must never be forgotten that verbalization can show only a limited scope of art and, segregated from emotional experience, it can sometimes lead away from the real meaning rather than toward it.¹⁰³

For Moholy-Nagy, the artist uses “visual fundamentals” which may be held in common by artists, but which are used in individual ways not always understandable to

¹⁰⁰ Moholy-Nagy, *Vision in Motion*, 7.

¹⁰¹ Moholy-Nagy, *Vision in Motion*, 25.

¹⁰² Moholy-Nagy, *Vision in Motion*, 25.

¹⁰³ Moholy-Nagy, *Vision in Motion*, 114.

the viewer, unless explained. Explanations, he believes, have pitfalls. This belief is another variation of the “tool box” or “dictionary” concept that we saw in Kandinsky’s writing. While Moholy-Nagy was a crucial source of Kepes’s ideas about vision (especially in the *Malerie Photography Film* books), Kepes’s sources for his positing of vision as a language lay outside of Moholy-Nagy’s books.

Kepes quotes Piet Mondrian on equilibrium in *Language of Vision*. Mondrian was not on the faculty at the Bauhaus, but his book *Neue Gestaltung* was published as the fifth book in the Bauhaus book series in 1925.¹⁰⁴ In his essay “Plastic Art and Pure Plastic Art” he establishes two opposing tendencies in human expression: the “direct creation of universal beauty,” which he also equates with objective representation and with the universal; and “aesthetic expression of oneself” which he equates with subjective representation, abstraction, and the individual. It is crucial to effect a balance in order to achieve a unity and avoid “disequilibrium” and disorder. It is essential to try to determine the “great hidden laws of nature which art establishes in its own fashion.” These laws exist “hidden behind the superficial aspect of nature.” The most important law is “the fundamental law of dynamic equilibrium.”¹⁰⁵ Old forms of art tend to exhibit a static equilibrium, and they must be destroyed and rebuilt such a way as to construct “a rhythm of mutual relations.” The two tendencies, subjective and objective, must be held in ongoing balance.¹⁰⁶

Mondrian makes a distinction between “pioneers” of art and “the mass.” The “pioneers” discover the underlying laws of nature and apply them to art. While these laws are universal, and this art is meant to enlighten mankind and contribute to the progress of

¹⁰⁴ Piet Mondrian, *Neue Gestaltung: Neoplastizismus = Nieuwe Beelding* (Munich: Albert Langen, 1925).

¹⁰⁵ Piet Mondrian, “Plastic Art and Pure Plastic Art” in Herschell B. Chipp, *Theories of Modern Art: A Source Book by Artists and Critics*, 349-62, (Berkeley, Calif.: University of California Press, 1968), 355, as originally published in J. L. Martin, B. N. Nicholson, and N. Gabo, eds., *Circle: International Survey of Constructive Art* (London: Faber and Faber, 1937), 41-56. Kepes may have read this in *Circle* as he was in London in that year. In *Language of Vision*, 120, Kepes cites Mondrian’s *Pure Plastic Art* of 1942. I can locate no such title published in that year.

¹⁰⁶ Mondrian, “Plastic Art,” 361.

humanity, it is not meant to communicate to everyone. “They [the pioneers] discover consciously or unconsciously the fundamental laws hidden in reality, and aim at realizing them. In this way they further human development. They know that humanity is not served by making art comprehensible to everybody; to try this is to attempt the impossible.” Human progress can be attained through art’s struggle to achieve “universal beauty.”¹⁰⁷

Kepes shares certain of Mondrian’s beliefs, such as the belief that art should achieve an equilibrium in order to partake of a greater unity, and through this art human culture can be developed in a progressive way. However, he departs from Mondrian in his belief that art, structured like language, can communicate universally, and can train all humans (not just a select group, as Mondrian would have it) to see and therefore understand, eventually realizing the potential for social good. Mondrian retains a metaphysical role for art, and he never speaks of art as a language.

Walter Gropius specifically mentioned a language of vision (not a grammar of art or a dictionary of elements). In “Education Towards Creative Design” of 1937, Gropius mentions a “language of shape” and a “grammar of design” based on “an objective knowledge of optical facts—such as proportion, optical illusions and colors.” Here he emphasizes optical facts that serve as structure or bounds within which the “multitude of individuals can work together harmoniously.”¹⁰⁸ This is not an optical structure for insuring communication with viewers. Rather, it is here presented as a universally understood professional art-making technique.

Gropius incorporates portions of this earlier essay in his book *Scope of Total Architecture* in chapter 2, “My Conception of the Bauhaus Idea” under the subhead “Language of Vision.” *Scope*, however, was published in 1955, after Kepes’s book appeared.¹⁰⁹ Gropius’s chapter title, referring as it does to the Bauhaus, links Kepes’s post-Bauhaus ideas with the German institution in a way that is confusing. Indeed,

¹⁰⁷ Mondrian, “Plastic Art,” 352.

¹⁰⁸ Walter Gropius, “Education Towards Creative Design,” *American Architect and Architecture*, 81 (May 1937): 26-30.

¹⁰⁹ Walter Gropius, *Scope of Total Architecture* (New York: Harper, 1955), 19-29.

Lorraine Jensen, reviewing the book in 1956, mistakenly locates Kepes's concept of a language of vision in the Bauhaus. She writes, "[T]here is a concise exposition of the Bauhaus philosophy, where the 'language of vision' which phrase later became the title of an important book by Georgi Kepys [*sic*], was one of the most significant contributions to education of the artist, the architect and the craftsman. For the first time perhaps, lines, shapes and masses were organized into a language, by means of which the worker in the graphic and plastic arts could give tangible expression to his ideas with universal meaning."¹¹⁰

Many of the concepts and concerns Kepes presents in *Language of Vision* have roots in the Bauhaus, as we have seen. General notions of a language of art elements, of universal laws, of structure, order, and utopic hopes for the effects of art on mankind run through much of the writings of Bauhaus artists. The term language of vision and the meaning behind it are a synthesis of these and other ideas which Kepes encountered over the years leading up to its publication. The following chapters will delve into his other sources.

¹¹⁰ Lorraine Jensen, Review of *Scope of Total Architecture* by Walter Gropius. *Art Education* 9 no. 7 (1956): 14-15.

CHAPTER 3

ADVERTISING PSYCHOLOGY IN BUDAPEST

Although he directed *Language of Vision* to working commercial artists, Kepes had surprisingly little to say about such practical matters as compositional rules or page layout. He had a great deal to say about the much larger need for bringing order to the modern world. He wrote, “Integration, planning, and form are the key words of all progressive efforts today; the goal is a new vital structure-order, a new form on a social plane, in which all present knowledge and technological possessions may function unhindered as a whole.”¹¹¹ What stands behind Kepes’s social concern and its visual expression? In particular, what precedents exist for his conviction that commercial forms can be used to organize or structure modern visual communication, and possibly even modern life itself? Kepes was well known for bringing together the ideas of modern thinkers in the arts and sciences in his many publications of the 1950s and 1960s. What then are the roots of his approach to his concept of the language of vision? To understand his urge to find structural laws and to locate the origin of his thinking, one needs to understand the intellectual context in which he and his colleagues worked.

In this chapter, I will establish Kepes’s understanding of the idea of structure. I will then show that Kepes drew on the beliefs of members of the Hungarian avant-garde and of his mentor Lajos Kassák in particular, for whom visual advertising was not simply an attention-getting form of communication (whether pro-capitalist, value-neutral, or pro-marxist as scholars have argued) but a systematic entity, a structure for meaning. I argue that Kassák and Kepes shaped their work according to the underlying structure of advertisements of their day. The designers of these ads were often aware of advertising

¹¹¹ *Language of Vision*, 12.

psychology like that of Walter Dill Scott, who applied Wilhelm Wundt's psychological theories, particularly the broadly understood concepts of apperception and fusion, to advertisements. I find that these ideas underlie Kassák's and Kepes's work in late-1920s Budapest and can be found in *Language of Vision*.

Kepes's understanding of structure was informed by but not limited to notions of Gestalt that he included in *Language of Vision*. He also used the language model of logical positivism as an avenue toward his ultimate destination. He did not develop these systems, so without proprietary interest in them he felt free to combine common elements of these systems. His statement from his 1965 book *Structure in Art and Science* bears this out. He writes

Structure, in its basic sense, is the created unity of the parts and joints of entities. It is a pattern of dynamic cohesion in which noun and verb, form and to form, are coexistent and interchangeable; of interacting forces perceived as a single spatio-temporal entity.

It is no quibble to separate the notion of structure from such related concepts as order, form, organized complexity, whole, system, or Gestalt. Each historical era seeks and needs a central model of understanding. Structure seems central to our time—the unique substance of our vision.¹¹²

Kepes's idea that structure was central to his era is similar to Terence Hawkes's belief that the concept, which gelled in the early twentieth century, began with observations of the natural world that came to be applied to perception. Scientists showed that, contrary to appearances, the world was not made of discrete objects, simply and directly understood and classified by observers. Instead, objects were made up of atoms and molecules that were not solid but were held in relationship to one another by forces that could not be seen. Furthermore, these objects interacted constantly with the molecules of their environments, so that everything in this new model of the world was interrelated and enmeshed. The nature of things shifted in relation to the position of the observer, and these constantly shifting relationships, not the objects themselves, defined the substance of the world. Hawkes writes

This new concept, that the world is made up of relationships rather than things, constitutes the first principle of that way of thinking which can properly be called

¹¹² Gyorgy Kepes, ed. *Structure in Art and in Science* (New York: Braziller, 1965), ii.

“structuralist.” At it simplest, it claims that the nature of every element in any given situation has no significance by itself, and in fact is determined by its relationship to all other elements involved in that situation. In short the full significance of any entity or experience cannot be perceived unless and until it is integrated into the structure of which it forms a part.¹¹³

Kepes’s general interest in structure reflects this new broadly defined notion of the first half of the twentieth century, and his more particular interest in systems to define structure reflects a trend to apply structural thinking to particular fields. John Sturrock calls these two related concepts “small-s structuralism” and “capital-S Structuralism.” He points out that the study of structures is so important to every field, from physics to art, and so pervasive that it often is not explicitly named. This “small-s structuralism” corresponds to Kepes’s larger concerns. The narrower application of structural thinking, which began in linguistics and was taken up by social anthropology, literary studies and other disciplines he calls “capital-S Structuralism.” As Sturrock states, the small-s structuralism “forms the solidly established methodological background against which it [Structuralism] deserves to be seen.”¹¹⁴ One might make an analogy in saying that it is against this small-s structuralism that Kepes’s contemporaneous methodologies deserve to be seen.

On August 29, 1948, Sibyl Moholy-Nagy wrote a letter to Gyorgy Kepes, requesting some help with her biography of her husband László Moholy-Nagy, who had died two years earlier. She was working on the Chicago School of Design period of Moholy-Nagy’s life, when he and other faculty members shaped the original Bauhaus curriculum into that of the School of Design. She wrote, “So would you be good enough to jot down a few points outlining your work in visual design as far as it differed or added with respect to the old Bauhaus program? I am sure that it will deal mostly with your concept of teaching color but there might be other visual problems I have overlooked.”¹¹⁵ In his reply Kepes wrote

¹¹³ Terence Hawkes, *Structuralism and Semiotics* (Berkeley: University of California Press, 1977), 17.

¹¹⁴ John Sturrock, *Structuralism*, 2nd ed. (London: Blackwell, 2003), 22-23.

¹¹⁵ Letter from Sibyl Moholy-Nagy to Gyorgy Kepes, Aug. 29, 1948, Gyorgy Kepes papers, microfilm reel 5303, frame 213, Archives of American Art. The book in

As far as I can generalize, the difference between my approach and that of the old Bauhaus lie [sic] in that the Bauhaus emphasized exploration of new materials, techniques and sensory fields such as the tactile, which was mainly a process of opening up the horizon; whereas I was more interested in organizing these new findings, and put the emphasis as in my book [*Language of Vision*], on the meaning of order in visual experience in its present social context. My approach implied that all [exercises] had their focal points not only in the extension of the range of visual sensibilities, but also in acquainting the students with the structural laws of plastic experiences. I always tried to refer these structural laws back to their social meaning.¹¹⁶

Kepes was deeply concerned with the social implications of visual experience. His social concern caused the structure of visual experience which he advocated to take a commercial turn. Social concerns and commercial art structures seem at odds, yet many artists of the early twentieth century saw no such conflict and often yoked the two. In seeking to understand the nature of Kepes's language of vision, it is crucial to understand the earliest sources of his understanding of structural laws and their application to commercial and easel art.

Concerning his sources, he states:

Every thought has a father and it is quite an assignment to trace back how much one has inherited and how much one has added to one's inheritance. In Budapest I worked and cooperated on a pioneer magazine edited by [Lajos] Kassak who was a great innovator in this field, and to whose circle Moholy had belonged in his early days, and I consider this avant-garde movement as the ancestor of my present outlook. I had already had a number of exhibitions in Hungary, and working with Moholy in Berlin gave me the congenial guidance to test these thoughts in practice. As you know, I never studied at the Bauhaus, and my bones were almost set in the fashion in which I now think when I came to Berlin.¹¹⁷

question is Sibyl Moholy-Nagy, *Moholy-Nagy: Experiment in Totality*, 2nd ed. (Cambridge, Mass.: MIT Press, 1969).

¹¹⁶ Letter from Gyorgy Kepes to Sibyl Moholy-Nagy, Sept. 8, 1948, Gyorgy Kepes papers, microfilm reel 5303, frame 220, Archives of American Art. Kepes ends the letter in this way: "As you see, the differences are only differences of emphasis, and you may be able to guage [sic] them better by checking a lecture I gave in 1939: 'Education In The Industrial Society,' or *The Language of Vision*, particularly the last chapter, 'Dynamic Iconography.' I do hope this gives you at least some answer to your questions, although I am aware, as I suggested at the beginning, that there is no hard line between the differences."

¹¹⁷ Letter from Gyorgy Kepes to Sibyl Moholy-Nagy, *ibid.*

Kepes knew Moholy-Nagy from 1930 to the latter's death in 1946. Moholy-Nagy propelled Kepes along his career path, but Moholy-Nagy's fame seems to have obscured Kepes's other mentors and colleagues, in spite of Kepes's care in giving them credit in interviews and essays. His early colleagues and mentors were further obscured when the Iron Curtain descended in mid-century. The lives and work of many members of the eastern European avant-garde of the early twentieth century were hidden from western European and American art historians for decades. Even now, years after the opening of the communist world to the west, scholars have difficulty filling the gaps caused by the loss of sources, the dearth of material that has been translated into western European languages, the political imposition of silence, and the threats to the work and even lives of so many artists under communist rule.

In articles and interviews, Kepes gave credit to his teachers and mentors from his student days in Budapest, yet interviewers unfamiliar with these people tended to pass over them. In an interview in 1968 with Dorothy Seckler for the Archives of American Art, Kepes emphasized the importance to him of his art teachers and in particular writer and artist Kassák (1887-1967), an important member of the European avant-garde (fig. 13). The interviewer had never heard of Kassák, so Kepes carefully spelled and pronounced his name, gave her some background on him, and enthusiastically tried to show Seckler a new book on Kassák that Kepes had just received from Hungary. The interviewer, like most westerners, could not place Kassák and was unable to follow Kepes's enthusiasm.¹¹⁸

Kassák left his working-class life in 1909 to travel through Europe, in the process becoming familiar with avant-garde art and literature as well as anarchist political ideas. He, colleagues and followers organized exhibitions, published pamphlets and the journals *A Tett* (Action) and *Ma* (Today), and sponsored lectures with the aim of provoking an eventual proletariat revolution. He was not welcome in the Hungarian Soviet Republic in spite of his leftist stance, and in 1920 he moved to exile in Austria where he continued to publish *Ma*. Kassák was in touch with Theo van Doesburg, Kurt Schwitters, and Sándor

¹¹⁸ György Kepes, interview by Dorothy Seckler, Aug. 18, 1968, audio tape recording, the Archives of American Art (my transcription).

Bortnyik, among other members of the European and Russian avant-garde, many of whom contributed to Kassák's publications.¹¹⁹ Though primarily a writer, Kassák also engaged in a constructivist-based form of painting and graphics, which he called *Képarchitektúra* (*Bildarchitektur* or Picturearchitecture).¹²⁰ In 1922 he and Bauhaus master and fellow Hungarian Moholy-Nagy wrote and designed *Buch Neuer Kunstler* (*Book of New Artists*). In 1924 he exhibited at Der Sturm gallery in Berlin. Kassák returned to Budapest in 1926 to continue his agitative organizing and publishing, and in the late 1920s he became a dynamic leader and teacher to Kepes and his student friends. Kassák and other members of the Hungarian avant-garde shared a concern to order and improve the world through correctly structured art. We see their urge to structure the visual in constructivism, and we see it also in their interest in modern advertising.¹²¹

Scholars have long acknowledged that the European avant-garde was interested in advertising and commercial art in general and have regarded the apparent conflict between commercial art and fine art as either resolvable or not. Art historians Éva Forgács, Éva Körner, S. A. Mansbach, Júlia Szabó, Esther Levinger, Ferenc Csaplár, and Maud Lavin have dismissed, mentioned, or explained the link leftist artists forged between social consciousness and commerce.¹²² Perceived conflict between commercial

¹¹⁹ S. A. Mansbach, "Revolutionary Engagements: The Hungarian Avant-Garde," in S. A. Mansbach *et al.*, *Standing in the Tempest: Painters of the Hungarian Avant-Garde 1908-1930* (Santa Barbara, Calif.: Santa Barbara Museum of Art, 1991), 67-70. Ferenc Csaplár, "Kassák the Book and Advertisement Artist," in Ferenc Csaplár, ed., *Lajos Kassák, The Advertisement and Modern Typography* (Budapest, Kassák Museum, 1999), 64-86.

¹²⁰ *Képarchitektúra* has been translated several ways. Here I follow the reasoning of Éva Forgács, who preserves the structure of the original term as two nouns combined with deliberate disregard for traditional usage, as "Bauhaus." See Éva Forgács, "Between Cultures: Hungarian Concepts of Constructivism," in Timothy O. Benson, ed. *Central European Avant-Gardes: Exchange and Transformation, 1910-1930* (Cambridge, Mass: MIT/Los Angeles County Museum of Art, 2002), 163, note 14.

¹²¹ Mansbach, "Revolutionary Engagements," 67-69, 79-81.

¹²² Forgács emphasizes the conflict between commercial design and social activism, and points up the failure of members of the Hungarian avant-garde to see that "advertisements are a crucial part of capitalist enterprises and their business interests." Forgács, "Between Cultures," 146-164.

visual forms and social causes presents a difficulty to scholars in approaching Kepes's

Körner treats commercial art as tangential to artistic, social or political concerns of Kepes's mentor Lajos Kassák. Eva Körner, "Kassák the Painter in Theory and Practice," *The New Hungarian Quarterly* 7, no. 21 (1966): 107-12. Eva Körner, "Kassák, The Artist" in Paul Kovesdy, John E. Bowlt, and Éva Körner, *Lajos Kassak: Retrospective Exhibition, April-May 1984* (New York: Matignon Gallery, 1984), 13-15.

Szabó touches on Kassák's posters, relating them to "constructivist Productivism," but does not directly address Kassák's commercial work. Júlia Szabó, "Ideas and Programmes: The Philosophical Background of the Hungarian Avant-Garde," in *The Hungarian Avant Garde: The Eight and the Activists* (London: Arts Council of Great Britain, 1980), 9-18.

Mansbach, in addressing this apparent art versus commerce conflict, points out that in the 1920s advertising design was seen as a "value-neutral" technique to communicate with the masses through clear, rational means. Mansbach, "Revolutionary Engagements," 79, and S. A. Mansbach, "Confrontation and Accommodation in the Hungarian Avant-Garde," *Art Journal* 49 no. 1 (Spring 1990): 16-17.

In contrast to these scholars, Levinger finds evidence that new posters, including advertising posters, "just like the new art, had specific social roles to play, namely, to suggest to the masses the new faith and the new morality, to realize the idea of Socialism, and to create the New Man and the new order." Esther Levinger, "Hungarian Avant-Garde Typography and Posters," in John Kish, ed., *The Hungarian Avant-garde 1914-1933* (Storrs, Conn., William Benton Museum of Art, 1987), 113.

Ferenc Csaplár also finds strong evidence of a rationale for using forms of commercial art to promote socialist Constructivist aims in Kassák's work. About Kassák, Csaplár writes, "He thought of an advertising artist as a 'social creator,' as someone who . . . was laying the groundwork for a new world." Ferenc Csaplár, ed. *Lajos Kassák: The Advertisement and Modern Typography*. (Budapest, Kassák Museum, 1999), 66.

Perhaps the most cogent exposition on the intersection of commerce with both fine and commercial art is presented by Maud Lavin. She argues strongly against the tendency to dismiss the interest of the early twentieth-century avant-garde in the practices and possibilities of commercial art in her essay on Kurt Schwitters's trade group, the Circle of New Advertising Designers (*ring* "*neue werbegestalter*"). About this group, which included in its orbit Kepes's mentors Moholy-Nagy and Kassák, Lavin writes, "Their utopian visions, infused with a technological romanticism, espoused rationalized production and communication techniques. These visions dovetailed with a common desire among artists of the time to work hand in hand with an enlightened proletariat to build a greatly improved, more equitable society with a truly modern standard of living." Maud Lavin, "Photomontage, Mass Culture, and Modernity: Utopianism in the Circle of New Advertising Designers," in Matthew Teitelbaum, ed., *Montage and Modern Life, 1919-1942* (Cambridge, Mass.: MIT Press, 1992), 36-59.

concept of a structured, socially effective visual language based on commercial art forms. In my approach to the issue, I adopt the more neutral stance of Michael Schudson toward advertising as more helpful to grasping the historical context of Kepes's work and thought. According to Schudson, "Apologists are wrong that advertising is simply information that makes the market work more efficiently—but so too are the critics of advertising who believe in its overwhelming power to deceive and to deflect human minds to its ends. Its power is not so determinative nor its influence so clear. Evaluating its impact is more difficult than these simplicities of apology and critique will acknowledge."¹²³ Though scholars have noted the avant-garde's interest in advertising and discussed possible conflicts, the actual application by the avant-garde of underlying structures and principles of advertising has not been closely examined. Advertising practices, especially those of American print advertising of the early twentieth century, were based on psychological research carried out by German and American psychologists. As Ellen Mazur Thomson has shown, American advertising psychologists derived practical principles based on this academic research and published them widely in scholarly and popular books and articles.¹²⁴ Avant-garde artists such as Kassák show evidence of an awareness of advertising psychologists' analysis of the play between word and image in modern commercial communication.

By the time Kepes received his master's degree from the Budapest Academy of Fine Art, the most dynamic period of avant-garde art in Hungary had peaked. In a seminal discussion of the Hungarian avant-garde, Júlia Szabó defines three periods: the early avant-garde, of which the artists' group the Eight were a part; the second generation of the Activists; and a third wave of the 1920s.¹²⁵ Szabó says that the earliest Hungarian avant-garde believed that the discovery of "absolute order" and the achievement of a

¹²³ Michael Schudson, *Advertising, The Uneasy Persuasion: Its Dubious Impact on American Society* (New York: Basic Books, 1984), 11.

¹²⁴ Ellen Mazur Thomson, "'The Science of Publicity': An American Advertising Theory, 1900-1920," *Journal of Design History* 9 no. 4 (1996): 253-272.

¹²⁵ Mansbach, "Revolutionary Engagements," 52-54. Members of The Eight were Róbert Berény, Béla Czóbel, Dezső Czigány, Károly Kernstok, Ödön Márffy, Dezső Orbán, Bertalan Pór, and Lajos Tihanyi.

perfect “artistic form expressing pure relationships” would help usher in a more harmonious age.¹²⁶ Similarly, the Eight’s leader Károly Kernstok (1873-1940) called for forging new forms and structures for art in the belief that art and artists were responsible for the transformation of the forms and structures of society. Mansbach points out that just how art was supposed to effect a transformation of society’s structure was never spelled out, and that the Eight rather naively did not fully grasp the intellectual programs of the circles.¹²⁷ Though The Eight were active when Kepes was only a child, their demands for social restructuring and their call for artists to lead the change through new art set the tone for Hungarian art for years to come.

The idealism of the early avant-garde and the Eight gradually shifted from the pursuit of ideal forms to the far more politically-driven art of the group which overlapped and followed them, the radical group called the Activists. Kepes’s mentor Kassák was associated with the Activists, and with the “third wave” of avant-garde activity in the 1920s. For the Activists, the thinking of Marx and the art movements of expressionism, cubism, and constructivism supplanted The Eight’s emphasis on the ideas of Kant and Hegel, and the art of Cézanne and symbolism.¹²⁸

In spite of the radical activities of the Eight, the Activists, and the “third wave,” Kepes’s school, the Budapest Academy of Art, was untouched by the avant-garde of the 1910s and remained relatively conservative throughout the 1920s. Kepes’s major teacher at the Academy was István Csók (1865-1961). Csók allowed students to explore groundbreaking trends from earlier decades, including cubism and expressionism, although Csók’s own work was in a loosely-brushed, *plein-air* vein.¹²⁹ In order to learn

¹²⁶ Szabó, “Ideas and Programmes,” 9.

¹²⁷ Mansbach, “Revolutionary Engagements,” 52-3.

¹²⁸ Szabó, “Ideas and Programmes,” 9-14.

¹²⁹ Ferenc Csaplár, *Kassák Körei*, (Budapest: Szépirodalmi Könyvkiadó, 1987), 257. Karoly Lyka, Academy president in the early 1920s, brought painters István Csók and Janos Vaszary to teach, and attempted to introduce reforms and modernize the traditional teaching methods. He met with resistance from advocates of academic painting, who in 1923 pressed their concerns all the way to Hungary’s regent Miklós Horthy and the National Fine Arts Council, which turned down their requests to remove

about contemporary art, Kepes and his fellow students depended on second-hand sources—a book by Albert Gleize and an essay by Juan Gris on cubism, an old magazine essay on Van Gogh and Gauguin by György Lukács written when Kepes was a child, and reports from friends who had visited Western Europe.¹³⁰

In 1925, Kepes and his friends, all students of Csók and János Vaszary (1867-1939), established a group called the New Progressives, which shared an interest in new art.¹³¹ As the founder and leader of a group called the New Society of Artists (*Képzőművészek Új Társaságának* or K.U.T.), which continued the progressive art interests of the earlier Group of Eight, Vaszary represented a challenge to established Hungarian culture.¹³² With the tolerance and encouragement of Csók and Vaszary, Kepes and the New Progressives studied Bauhaus publications and exhibited in the Mentor bookstore, a gathering place for progressive artists, writers, and others in Budapest. Kassák made the acquaintance of The New Progressives at this time.¹³³

During his time at the academy and immediately after, Kepes saw the conflicts and sacrifices that an adherence to advanced art could precipitate. Student work at the academy, while several years behind the most current western European work, still threatened the conservative Hungarian government. In 1929, Vaszary and Csók's classes were raided by the police. Kepes remembered that one of his professors (presumably Csók), in spite of the fact that he did not completely understand the students' work, stood

Csók and Vaszary. My thanks to Eva Simanyi for her translation from the Hungarian of parts of Csaplár's book.

¹³⁰ Gyorgy Kepes interview with Robert Brown, March 7, 1972-January 11, 1973, transcription of tape recording, Archives of American Art. Lukács's essay can be found in György Lukács, *The Lukács Reader*, ed. Arpad Kadarkay (Oxford: Blackwell, 1995), 160-66.

¹³¹ Botar, "Chronology," in Mansbach *et al.*, *Standing in the Tempest*, 205-8; and Csaplár, *Kassák Körei*, 257.

¹³² Csaplár, *Kassák Körei*, 258.

¹³³ Botar, "Chronology," 209; Csaplár, *Kassák Körei*, 257, 263. Trauner and Schubert exhibited together at the Mentor gallery in February 1928. Kassák exhibited his work at the gallery the following month.

up for the young people and in consequence was forced to retire.¹³⁴ Kepes recalled that a Hungarian newspaper printed a long interview with this professor in which he emphasized “how he stuck his neck out for us young generation.”¹³⁵ In what appears to be a separate incident in 1929, Kepes remembered that a minister of culture, a “brilliant Catholic bishop, but [with] a complete blindness to art” visited the academy’s studio used by Kepes and three friends. The minister of culture’s derogatory comments on the students’ art so incensed the young men that they confronted him, saying he knew nothing about art, which prompted the dismissal of some of them from the academy at the end of the term.¹³⁶

In 1928 Kepes graduated from the Academy with a master’s degree and met Kassák, who had returned from exile in Vienna to Budapest in 1926. Kassák met Kepes and the other members of the New Progressives at the Mentor Bookstore in 1928, he and visited them in their studio in Epreskert (Mulberry Garden, a building which housed students’ studios not far from the Budapest Academy).¹³⁷ Although this was not the first flowering of the Hungarian avant-garde, the energy and conviction of this political, social, and artistic moment was almost palpable, and the attraction of Kassák’s leadership was strong. Kepes recalled Kassák’s personality as magnetic and militant, in contrast to the “sweet and humble” personality of his stalwart professor at the Budapest Academy.

¹³⁴ Kepes interview with Brown. Csaplar, *Kassák Körei*, 257-58, writes of an attempt by conservative forces, provoked by a May 1928 untraditional student exhibition, to remove Csók and especially Vaszary from their posts, perhaps the visit which Kepes remembered. Botar, “Chronology,” 210, mentions a police raid of Vaszary and Csók’s classes in the spring of 1929 which resulted in expulsion of members of the New Progressives. Internal details in these reports suggest that these were two separate incidents.

¹³⁵ Kepes interview with Dorothy Seckler.

¹³⁶ Gyorgy Kepes, interview with Robert Brown; Kepes interview with Dorothy Seckler.

¹³⁷ Csaplár, *Kassák Körei*, 257. Csaplár dates the meeting of Kassák and the New Progressives in February 1928 at an exhibition of the work of Trauner and Schubert at the bookstore Mentor, gathering place for the avant-garde. Botar, “Chronology,” 210, dates the meeting to fall of 1928, at an exhibition of Kassák’s own work at Mentor.

Kassák's strong ego and firmly-held convictions provoked the students he gathered around him to clarify and defend their own ideas.¹³⁸

Kepes was deeply involved with *Munka-kör* (Work Circle), a student group Kassák established as an adjunct to a leftist group that broke away from a print worker's union. With the help of Kassák and poet Jolán Simon, who saw an opportunity to introduce the young people to socialist literature and art, the break-away union members established a poetry recital group which performed at the print workers' union midsummer celebration in June 1928, and at Social Democrat functions.¹³⁹ György Nemes recalled his response to one of these performances, saying, "The success, the excitement, saw no end. It just about tore the walls apart. . . . I applauded until my hands turned red, and shouted insanely, enamored with these experiences. I felt as though my strength was multiplied; I was not alone." As had the progressive students' art, the performances stirred the police to suppress them.¹⁴⁰ In 1929, Kassák directed the discontent of high school and college students who clashed with academic administrations toward his leftist associates and their activities. Eager to share the sense of solidarity like that described by Nemes, students introduced friends and family to Kassák's circle. The New Progressives (including Kepes, although by now he had graduated) joined the student organization of *Munka-kör*, which was illegal because student groups which operated outside of schools were banned.¹⁴¹ In order to prepare *Munka-kör* members to debate, argue, and reason more effectively, Kassák arranged seminars which were led by his colleagues. He divided the fifty or sixty *Munka-kör* members into groups of ten for small, intensive seminars on such subjects as the history

¹³⁸ Kepes interview with Seckler.

¹³⁹ Csaplár, 254-55. Included in the poetry recital group's performances was Kassák's *Mesteremberek* (*Tradespeople*) and *A munka és a harc emberei* (*Men of Labor and Struggle*), Zseni Varnai's *Kórus szopránba* (*Chorus in Soprano*) and *Eljön egyszer az óra* (*The Hour Will Come*), Walt Whitman's *The Big City*, Carl Sandburg's *The Road and The End*, and Ernst Toller's *Requiem*.

¹⁴⁰ György Nemes, "Rubáska," *Népszabadság*, Jan. 1, 1977, 9, quoted in Csaplár, *Kassák Körei*, 255.

¹⁴¹ Csaplár, *Kassák Körei*, 256-59, 261-62.

of the socialist movement, Marxist economics, and dialectical materialism. Kassák expected Munka-kör members who completed the seminars to lead further seminars.¹⁴²

In September 1928, the Munka group began publication of a journal of the same name. *Munka* covered a broad range of subjects of local interest—political, cultural, artistic, economic—from a socialist viewpoint, and Kassák continued to publish it until 1939.¹⁴³ *Munka-kör* members distributed the journal through their work places, unions, and political organizations, stirring up debate in the process. Kepes recalled that he was “deeply involved” in the journal, and those who worked on *Munka* believed “that our duty is also to distribute our new insights to the workers or peasants.” Kepes also participated in one of the worker’s choirs and other activities such as improvising set designs.¹⁴⁴ Kepes remembered, “We had a magazine together, and he almost groomed us.”¹⁴⁵

Kassák critiqued young artists’ and photographers’ work, taught typography to young print workers, discussed articles with *Munka* writers, advised authors, and worked with teachers and seminar leaders. The student arm of the *Munka-kör* also held seminars and published flyers and brochures. The young artists of *Munka-kör* participated in the folk music choir and the choral speaking group, rubbed elbows with Lajos Gro, film critic, who introduced them to Russian films, and built friendships with writers and poets.¹⁴⁶

Kepes’s youthful outlook was profoundly shaped by this driven leadership of Kassák. In an interview in 1968, Kepes testified to Kassák’s power to shape the vision of those who came into his sphere: “He was somebody who was an eye-opener, not just for me. You know Moholy? He was who made Moholy. He was a man who had an intensity, and strengths of vision. . . . He was a catalyzer, he was a man who had a tremendous

¹⁴² Csaplár, *Kassák Körei*, 261-62.

¹⁴³ Mansbach, “Revolutionary Engagements,” 79.

¹⁴⁴ Kepes interview with Seckler.

¹⁴⁵ Kepes interview with Seckler.

¹⁴⁶ Csaplár, *Kassák Körei*, 264.

intensity and ambition and a real conviction that what he sees has a validity for everybody.”¹⁴⁷

Little of the work by Kepes or his fellow student artists still exists, so it is necessary to rely on reproductions in *Munka* or descriptions of this work in newspaper reviews of the day, as Csaplár has done, in order to get a sense of it. The student group’s work consisted of watercolors, charcoal drawings, and photomontage. The subject matter was primarily poverty and want—scrawny, barefoot old women and children, cripples preyed upon by fat capitalists, a few potatoes, an onion, bits of dry bread, sometimes mingled with scraps of old wood, sawdust, and shabby bits of metal. Some *Munka-kor* student artists used a cubist style or geometric structures, and many included photomontage. Colors were dark and muted. The themes of this student work were indictments of oppressive capitalism and general calls for greater social consciousness. Kassák supported this content, but sought to drive the students away from a reliance on realistic subject matter toward greater abstraction and structure, a direction which Csaplár maintains they would not take.¹⁴⁸

While Kepes and the other student artists involved in *Munka* were eager for the opportunity to have their work published in the journal, they increasingly felt the pressure of Kassák’s strict discipline and narrow goal of social agitation. The shared lifestyle demanded all of their spare time and energy.¹⁴⁹ Kepes recalled, “This man had a tremendous ego and we had to fight back. He just didn’t want to let us go up, and that’s a very good teacher, because you develop your inner muscles, your emotional and intellectual muscles.”¹⁵⁰ Some members of the young group protested against Kassák, whose power over them was partly diminished by the attraction of composer Béla Bartók’s involvement with their folk music choir.

¹⁴⁷ Kepes interview with Seckler.

¹⁴⁸ Csaplár, *Kassák Körei*, 263-66.

¹⁴⁹ Botar, “Chronology,” 211. Kassák reproduced some of the New Progressives work in the *Munka* November 1929 issue, and in later issues, although by 1930 the group had broken up. On Kassák’s effect on the student artists, see Csaplár, “*Kassák Körei*,” 268.

¹⁵⁰ Kepes interview with Seckler.

In 1929, Kepes exhibited several works, including *In Memory of L.R.*, in an exhibition coordinated by the New Society of Artists (K.U.T) in Budapest, the group founded by Kepes's former teacher Vaszary (fig. 14).¹⁵¹ *In Memory of L.R.* is a photcollage with oil and sand of Rosa Luxemburg, co-founder with Karl Liebknecht of the German Communist party. Luxemburg and Liebknecht were assassinated by German troops after organizing a revolt in 1919. On the dark-colored background, Kepes uses rectangles formed by fine white lines, some angled, some bleeding off the edges, to structure his composition. In the corner of the central rectangle he pasted a picture cut from a magazine of the distorted head of the slain Luxemburg, eyes staring vacantly and mouth open. Enclosed in a tilted rectangle and poised on the downward slope of another rectangle, over the head of Luxemburg, is a photograph of a nude woman. Her toe coyly pointed, her hand to her hair, this figure reflects a popular notion of idealized female beauty, and was probably also clipped from a mass publication. At the bottom of the work, anchoring these women in their floating rectangles, is a photograph of a cluster of metallic gears or locomotive wheels. It is possible to read in this work a simple, straightforward message: the machinations of evil organizations may destroy our revolutionary leader, but she and her ideals will be remembered by the people forever.

By late 1929, the group of young artists who had gathered around Kassák gradually began to disperse. In March 1930, after the only exhibition of the work of the New Progressives at Tamás Gallery, all of the young *Munka* artists left Hungary, most never to return.¹⁵² Kepes's experience with Csók and Vaszary at the art academy, his acquaintance with some major figures of twentieth-century art, music, and literature, and his participation in the cultural ferment of Budapest in late 1920s certainly contributed to his notion of a twentieth-century language of vision. Csók and Vaszary provided examples of commitment to ideals, and Bartok provided a model for using popular forms to reach larger audiences. But because Kepes's ideas were primarily shaped by Kassák, it is most enlightening to examine Kassák's views on art, on commercial art, and on their communicative and world-changing potential.

¹⁵¹ Wechsler, 8-9.

¹⁵² Csaplár, *Kassák Korei*, 268-69; Botar "Chronology," 211.

Kassák saw potential fertile applications of commercial art structures for communications and aesthetics. He had been interested in the potential of commercial art as a source of new aesthetic forms since at least 1916, when he established his activist journal *Ma* as a business enterprise with two arms: the publishing office and the editorial office, with an editor independent of the business side. His experience with the *Ma* enterprise undoubtedly gave him further insight into the possibilities of the union of art and commerce.¹⁵³ In an essay entitled “The Poster and the New Painting,” which appeared in the first issue of *Ma*, Kassák celebrates a successful poster as a powerful, dynamic, modern vehicle of communication.¹⁵⁴ He defines Impressionism as a spent force, sentimental and naive. In its place is a new form of painting in which the natural world is not the subject to be reproduced but the raw material from which art is to be fashioned. What gives a work of art staying power is not its subject, whose “social value” drains away over time, but its “evocative power” or the strength of the manner in which the artist evokes the subject. Posters embody this evocative power. They have an “agitative nature” and a forceful ability to provoke a response from the viewer through suggestion, without blatant representation of a product. With the capacity to command attention against the buzzing, humming background of modern urban life, posters offer something new to art—a modern form of communication which fulfills avant-garde requirements for the new, the ahistorical, and the powerfully mass-oriented.

By 1922, Kassák had developed his *Képarchitektúra* and published a manifesto of the same name in *Ma*. In this manifesto Kassák argues that even though the “Cubists, Expressionists and the Merz painters” (his examples are Picasso, Kandinsky, and

¹⁵³ Editors of *Ma*, “Advertisement,” originally published as “Propaganda,” *Ma* 1 (1916) no. 1, transl. John Bátki in Timothy Benson and Eva Forgács eds., *Between Worlds: A Sourcebook on the Central European Avant-Gardes, 1920–1930*. Cambridge, Mass: MIT/Los Angeles County Museum of Art, 2002), 162-63.

¹⁵⁴ Lajos Kassák, “The Poster and the New Painting,” originally published as “A plakát és az új festészet,” *Ma* 1 (Nov. 1916), no. 1, transl. John Bátki, in Benson and Forgács eds., *Between Worlds*, 163-66. “The successful poster is always conceived in a spirit of radicalism (its creator always intends it to break through a settled mass or overcome an opposing current). For this reason it always leaps onto the stage as a unique and absolute force, and never as merely one of an anonymous crowd. It is always agitative by nature, and essentially impossible to constrain within bounds.”

Schwitters) sensed that it is now more important to create or construct rather than represent, these artists did not reach their destination because they offered “the illusion of a world that exists, once existed, or may exist.” For Kassák, this is not yet enough. Picturearchitecture (the constructed or built picture) is the “absolute picture.” Kassák expressed his lack of faith in the ability of revolutionary movements to change the world permanently for the better. It is human nature to fail to keep the possibility of a better world foremost in mind, and to settle for crumbs flung by a bureaucracy today rather than fight for a feast tomorrow. Because of this, it is the task of artists to set to work on the minds and hearts of the people, not to promote a particular message, but to encourage the creation of a new world. Kassák expounds on how Picturearchitecture is not interested in created illusionistic space or “plane surface ‘perspectives’” intended to deceive. Picturearchitecture is constructed from the picture surface out into space, and exists as an independent object constructed of actual, not represented, relationships between its elements.¹⁵⁵

Kassák’s *Picturearchitecture V* is typical of his paintings (fig. 15). Simple geometric forms—rectangles, a segment of a circle, shapes formed by right angles—are set into stable, ordered relationships. Some suggestion of overlapping, as with the yellow vertical shape that appears to cut off the blue circle segment, can be perceived. One vertical yellow form seems to be overlaid by the blue segment, which in turn seems to underlie another vertical yellow element. Because these yellow verticals are similar in color, size, and shape they appear related in space as well, both occupying the same plane, thus negating any possibility of perceiving one as “behind” the other. The palette in this painting is strictly limited. Colors are unblended and limited to the shapes. Here Kassák has carried out one of his Picturearchitecture dicta: “The perspective between forms and colors originates not from the apparent construction of bodies depicted behind each other, but from the corporeality of the colors actually present and the flat forms themselves. . . . Decoration is filling up the flat surface, Képarchitektúra is building on

¹⁵⁵ Lajos Kassák, “Picture-Architecture,” originally published as “Képarchitektúra,” *Ma* 7, no. 4 (March 25, 1922), transl. George Cushing, in Benson and Forgács, eds. *Between Worlds*, 427-431.

the flat surface.”¹⁵⁶ Kassák’s art emphasizes its physical presence, not illusion. It is not an abstraction in the manner of Kandinsky, whom Kassák takes to task for producing paintings that are narratives or abstractions from nature.¹⁵⁷

His Picturearchitecture and his graphic design work shared an efficacious quality based on clear, structured relationships that, while often both practical and utopian, were apolitical. In both his approach to posters and to easel art, as Szabó states, Kassák “endorsed a program of applied art which was reminiscent of constructivist productivism.”¹⁵⁸ But Kassák’s Picturearchitecture only generally recalls Russian constructivist productivism, because his art was not placed in the service of the state or of any particular political party.¹⁵⁹ Both Kepes in *Language of Vision* and Forgács in the essay “Between Cultures: Hungarian Concepts of Constructivism” offer similar views of two differing forms of constructivism, that of eastern Europe and of western Europe. Forgacs maintains that Hungarian (and therefore Kassák’s) constructivism is not part of either of the two dominant forms. Kepes also discusses two types of constructivism, and as might be expected of a student of Kassák’s, sees flaws in both forms.¹⁶⁰

Like good commercial advertising design, Kassák’s Picturearchitecture at its best was intended to allow masses of people, not individual connoisseurs of easel pictures, to feel a generalized energetic charge, an “immediate revelation.” The underlying purpose of both Picturearchitecture and dynamic commercial art is to stimulate the viewer to transform this energy into some revitalized approach to life. For Kassák,

¹⁵⁶ Kassák, “Picture-Architecture,” 431.

¹⁵⁷ Ibid., 429.

¹⁵⁸ Szabó, “Ideas and Programmes,” 15.

¹⁵⁹ Oliver A. I. Botar discusses Kassák’s ideas of the 1920s concerning the role of the artist in bringing about a spiritual or psychic revolution independent of political or economic revolutions and political parties. Oliver A. I. Botar, “Constructed Reliefs in the Art of the Hungarian Avant-Garde: Kassák, Bortnyik, Uitz and Moholy-Nagy 1921-26,” *The Structurist* 25/26 (1985): 87-98. Mansbach points out that he resisted pressure from fellow Hungarian artists Sandor Bortnyik and Bella Uitz to align his work with the aims of the proletariat. Mansbach, “Revolutionary Engagements,” 68-69.

¹⁶⁰ Forgacs, “Between Cultures,” 146-164.

Picturearchitecture functioned like dynamic mass advertising in that the superficial message is not the crucial thing, but the act of creation itself, and the energy it releases. Kepes reflected his mentor's approach years later in his *Language of Vision*.

This new understanding of the potential of modern visual communication was not isolated to the exchanges between Kassák as mentor and Kepes as young artist. Interest in the potential of “the new typography” and of advertising had been welling up in Hungary, in other parts of Europe and the U.S. during the 1920s. Hungarian artist Sándor Bortnyik (1893-1976) worked closely with Kassák in the early 1920s in developing “*Bildarchitektur*” paintings and theories in Vienna before spending 1922 to 1926 in Weimar, where he kept in close touch with the Bauhaus and exhibited with Der Sturm. He returned to Budapest and in 1928 opened an art and design school called *Műhely* (Workshop) based on Bauhaus principles. Kepes and Victor Vasarely (1908-1997), later known for his Op Art works, studied with him.¹⁶¹ In the publication *Magyar Grafika* (*Hungarian Graphics*), Bortnyik published an article explaining the philosophy of Bauhaus education and announcing the establishment of his “free experimental school” which he hoped would gain the support of the journal's readers. He wrote, “The new printed products and the new poster, with which we come into contact ever more frequently at the Budapest advertising pillars, are not only technically rational and economical, not only have an elemental effect, but also are aesthetic and beautiful. *Their beauty lies directly in the harmony of the elements and in the laws of proportion.*”¹⁶² [My emphasis.] Bortnyik here declares beautiful the poster's structure itself. This idea that the

¹⁶¹ Júlia Szabo, “Color, Light, Form and Structure: New Experiences in Hungarian Painting, 1890-1930” in Mansbach *et al.*, *Standing in the Tempest*, 139. András Zwicky, “Sándor Bortnyik” in Mansbach *et al.*, *Standing in the Tempest*, 228. Sandor Bortnyik, “Something on the Bauhaus,” in Eckhard Neumann, ed., *Bauhaus and Bauhaus People: Personal Opinions and Recollections of Former Bauhaus Members and Their Contemporaries*, rev. ed., trans. Eva Richter and Alba Lorman (New York: Van Nostrand Reinhold, 1993), 87-91.

¹⁶² Sándor Bortnyik, “Programm des ungarischen Bauhauses. Neue Wege des ‘Kunstgewerbe’-Unterrichts,” originally published in *Magyar Grafika*, 1928, 255-258, reprinted in Hubertus Gassner, ed., *Wechsel Wirkungen, ungarische Avant-garde in der Weimar Republik*, ex. cat., Neue Galerie, Kassel and Museum Bochum (Marburg: Jonas Verlag, 1986), 376-79. My translation.

superficial message of the poster (a commercial message) is less important than the message that the structure of the poster conveys corresponds to Kassák's ideas on the power of advertising forms. Like Kassák, Kepes's teacher Bortnyik is captivated by the potential of commercial visual structures.

Kassák and Bortnyik were in close touch with European artists who shared their interests, and they were undoubtedly aware of the attitudes of Blaise Cendrars, Fortunato Depero, and F. T. Marinetti toward advertising.¹⁶³ Both exhibited in an international exhibition called *Grafische Werbekunst (Graphic Advertising Art)*, held in Mannheim in 1927.¹⁶⁴ By the end of the 1920s, Kassák had developed a network of artists and designers from all parts of Europe who produced advertising designs and other commercial work, much of which came under the umbrella of the typographer and writer Jan Tschichold (1902-1974). Kassák published Tschichold's influential "Elementary Typography" in the first issue of *Dokumentum* (December 1926), and Tschichold reproduced two of Kassák's works in his book *Die neue Typographie* of 1928. Kurt Schwitters proposed Kassák for membership in his group Ring "neue werbegestalter," (Circle of New Advertising Designers), and planned a new international advertising journal with foreign editors El Lissitzky, Karel Teige, and Kassák. Although the journal was never published, through his connection to Schwitters Kassák participated in exhibitions in Berlin, Magdeburg, Essen, and Basel.¹⁶⁵

¹⁶³ See Blaise Cendrars, "Advertising = Poetry" originally published in *Modernities* (Feb. 26, 1927), reprinted in Walter Albert, ed. *Selected Writings of Blaise Cendrars* (n.p.: New Directions, 1962; Westport, Conn.: Greenwood Press, 1978), 240-242; Fortunato Depero, "Outline of the Art of Advertising Manifesto," 1927, reprinted in Michael Bierut, Jessica Helfand, et al., eds., *Looking Closer 3: Classic Writings on Graphic Design* (New York: Allworth Press, 1999), 43-44; F. T. Marinetti, "Destruction of Syntax—Imagination Without Strings—Words-In-Freedom," first published in *Lacerba* (Florence: 15 June 1913), reprinted in Michael Bierut et al., eds., *Looking Closer 3: Classic Writings on Graphic Design* (New York: Allworth Press, 1999), 6-11. Wanda Corn discusses the importance of American advertising to members of the European avant-garde in *The Great American Thing: Modern Art and National Identity, 1915-1935* (Berkeley: University of California Press, 1999).

¹⁶⁴ Csaplár, "Kassák the Book and Advertisement Artist," 77.

¹⁶⁵ Lavin, 39. Members included Piet Zwart, Paul Schuitema, Willi Baumeister, Walter Dexel, Tschichold, and guest exhibitors Moholy-Nagy and John Heartfield,

In the essay “Advertisements,” which appeared in German and Hungarian in five different publications in 1926 and 1930, Kassák demonstrates his understanding of modern advertising psychology. He points to communist Russia, where more advertising exists than had in czarist Russia, but where the role of advertising is now to support community interests, not the interests of the élite. “The Russian advertisement, often in a manner similar to American advertisements, has distanced itself from individualistic graphics by discovering its own character as simplified, economical, and demonstrative.” He expands his idea of advertising beyond posters, refines his ideas about the aesthetic quality of advertising, reaffirms his belief in the power of ads to communicate in a modern way, and argues for the beneficial motivating power of advertising. While free-market capitalism has flaws and needs to be set on more socially equitable foundations, humans naturally have expanding needs that must be met by commerce.¹⁶⁶

Kassák believes that advertising’s purpose is to enliven people, to open their eyes to things they had not seen before, and to move them to take action, which might be anything from entering a new department store to opening a new book. Advertising “rouses us from the torpor of daily existence, from the blindness and deafness of wanting nothing—*its primary colors and dynamic articulation of form make us curious and determined.*” [Kassák’s emphasis]¹⁶⁷ The language of advertising is dynamic, modern, and addressed to a mass audience. Artists skilled enough to put this language to use were leading the masses and driving an engine that linked production and consumption.¹⁶⁸

among others. See Csaplár, *Lajos Kassák Advertising and Typography*, 76-80 for more on Kassák’s exhibitions. For more on the Circle of New Advertising Designers, see “*Typografie kann unter Umständen Kunst sein: ’Ring ’neue werbegestalter’*” (Wiesbaden: Landesmuseum Wiesbaden, 1990).

¹⁶⁶ Lajos Kassák, “Advertisements,” originally published as “A reklám,” in *Tisztaság könyve* (Budapest, 1926), transl. John Bátki, in Benson and Forgács, *Between Worlds* 621-22. For a different translation and the citation of other publications which published this essay, see Ferenc Csaplár, ed., *Lajos Kassák: The Advertisement and Modern Typography* (Budapest, Kassák Museum, 1999), 5-6.

¹⁶⁷ Ibid.

¹⁶⁸ See Lajos Kassák, “Comments on the Promotional Campaign of Hungarian Week,” *Reklámélet* (Nov. 1928): 3-5, reprinted in Csaplár, *Lajos Kassák: The Advertisement and Modern Typography*, 15-16. It is important to remember that not all of

Kassák sets out clearly in this essay ideas that Kepes will later develop and attempt to systematize: that the structured language of advertising, based in psychology, has a strong new aesthetic and an immense power to communicate with all people, moving them to reflection or action.

Both communist Russian propaganda and capitalist American ads are examples for Kassák of the powerful and effective use of this new language. Kassák reflects El Lissitzky's attitude that American graphic design could be a revolutionary new model for European printed matter. In "Our Book," Lissitzky wrote "In America there was a new optimistic mentality, concerned with the day in hand, focused on immediate impressions, and this began to create a new form of printed matter. It was there that they first started to shift the emphasis and make the word be the illustration of the picture, instead of the other way round, as in Europe."¹⁶⁹ Kepes may have known Lissitzky's essay, and was undoubtedly familiar with Kassák's essay. He surely would have taken part in discussions on the subject with Kassák and his followers.

Kassák and other avant-garde artists who looked to Russian advertising or American advertising as examples of a dynamic, instantaneous modern form of art and communication saw potential in the structure of print advertising. Kassák and other Europeans believed early twentieth-century American ads, shaped by advertising psychologists' systematic approach, were characteristically American and modern, loaded with potential to communicate in an aesthetically powerful and nearly instantaneous new way. We might expect that Europeans thought of Americans as consummate advertisers. What we may not expect is the association of advanced American advertising with German psychology in the early twentieth century and the place advertising held in the American academy. Scholars such as Lavin have studied the

Europe in the 1920s was awash in unnecessary goods, and under unwanted pressure from advertisers to consume. Much of eastern Europe was rural, populated with peasants unskilled in industrial production. Kassák criticized Hungarian owners and managers for knowing nothing about modern production methods and for failing to make use of effective advertising, which resulted in low productivity, low quality goods, and unemployment.

¹⁶⁹ El Lissitzky, "Our Book," in Sophie Lissitzky-Küppers, *El Lissitzky: Life Letters Texts* (London: Thames and Hudson, 1967), 360-61.

relationship of artists and commercial art, but the psychological theory that underlies advertising of the early twentieth century and its relationship to art of the time has not been thoroughly examined.¹⁷⁰

In the remainder of the chapter, I will look at two ideas, apperception and fusion, developed by the “father of modern psychology” Wilhelm Wundt, and show how his student Walter Dill Scott applied these ideas to advertising during the early twentieth century. To demonstrate his awareness of these principles of advertising psychology, I will then look at Kassák’s essay of 1928, “On the Road to Elementary Typography.” I then turn to a design of the same year by Kepes to illustrate the application of these ideas. Finally, I look at a portion of *Language of Vision* in which Kepes continued to make use of these ideas.

From around 1900 to the 1920s, leading American authorities on advertising often were trained in experimental and perception psychology at American and European universities. Walter Dill Scott (1869-1955) and other psychologists systematically applied ideas from psychology to advertising, and wrote articles and books which became standards in the field of advertising and business.¹⁷¹ Scott studied with Wilhelm Wundt, the eminent philosopher who established psychology as an independent discipline. His laboratory for experimental psychology, established in 1879 as the first in the world, researched sensation and perception, particularly of vision. He and his students also

¹⁷⁰ Ellen Mazur Thompson is one of the few scholars to have searched for the theoretical foundations of American print advertising of the early twentieth century. She holds that advertising psychology textbook writers from the period from 1900 through the 1920s applied information gained through experimental psychology, especially perception psychology, to the composition of ads. Her broad treatment tends to cast advertising psychology in a British empiricist mold, collapsing some important distinctions. See Ellen Mazur Thompson, “‘The Science of Publicity’: An American Advertising Theory, 1900-1920” *Journal of Design History* 4, no. 4 (1996): 253-272. In her discussion of two important figures, the “father of psychology” Wilhelm Wundt (1832-1920) and his student, the “father of American advertising psychology” Walter Dill Scott, Thomson aligns both with a British positivist tradition, a connection which has been discredited by Kurt Danziger. See Danziger, “Wundt and the Two Traditions of Psychology,” in *Wilhelm Wundt and the Making of a Scientific Psychology*, ed. by R. W. Rieber (New York: Plenum Press, 1980), 73-87.

¹⁷¹ Thomson, 253-272.

carried out auditory, touch, and taste studies; reaction work (establishing time between perception and apperception of a stimulus); and attention, feeling, and association research.

Wundt's concepts of apperception, an idea established by G. W. Leibniz and developed by Immanuel Kant and J. F. Herbart, and fusion, which he developed from Herbart's concept, were of great interest to advertising psychology.¹⁷² Apperception is the idea that the mind assimilates current sensations with previous perceptions and prior knowledge into a whole. Fusion for Herbart, who influenced the development of educational psychology, was the process by which ideas, rising above the threshold of consciousness, "fuse" with other ideas by association, to create a consolidated "mass" of ideas. Thus, for example, it is a teacher's function to feed the child's mind with ideas to build up that mass. Those ideas that do not fuse with others fall below the threshold of consciousness. Similarly, Wundt saw fusion as an associative process "based on the self-activity of an apperceiving unity and not on the coalescence of separate elementary reactions to external influence." That is, fusion is a process of the mind of the individual, independent of the series of external events joined by in the mind by apperception, but it is the means by which concepts are actively associated to form representations available to consciousness. It is, for example, the connection of the smell of bacon cooking with breakfast, or the pealing of bells with a church. Wundt subjected apperception to laboratory investigation and developed ideas about attention as a measurable function of apperception. Later Gestalt psychologists, in their emphasis on the perception of wholes, would criticize Wundt's psychology as overly focused on analysis into parts. However, Wundt did deal with wholes, although differently. For Wundt, the whole is the summation of discrete parts in apperception. For example, in his consideration of language acquisition and writing, Wundt states in his chapter on apperception in *An Introduction to Psychology* that "[t]he whole, even although in indistinct outlines, must be present in the consciousness of the author, before he writes down his sentences. . . . The whole was in his consciousness, but the separate parts entered successively into the fixation-point of apperception and then ultimately ended at the end of the paragraph with

¹⁷² Danziger, "Wundt and the Two Traditions of Psychology," 78.

the total feeling joined to the whole, which even at the beginning prepared for and influenced the coming paragraph.” That is, through the successive accretion of parts in apperception, a whole is created, and that whole exists in the consciousness before writing. The endpoint is already envisioned before writing commences. By the end of writing, the parts are once again joined into a whole reflective of the original. Readers’ mental states are somewhat different. The reader begins with an expectation of a whole, and through a process of “developing parts of the image,” results in a whole, a total idea. In other words, the reader progresses through the text, adding together the parts by a process analogous to apperception to reach a whole at the end.¹⁷³

Wilhelm Wundt’s ideas were perhaps most directly applied to advertising through the work of Scott. Scott, who wrote such widely-circulated books as *The Theory and Practice of Advertising*, graduated from Northwestern University in the 1890s, then earned a Ph.D. from the University of Leipzig.¹⁷⁴ He returned to the United States and briefly studied laboratory operations under Titchener at Cornell University.¹⁷⁵ Scott left Titchener’s laboratory to teach at Northwestern University and he establish his own laboratory at which he conducted experiments to determine such things as readability of typefaces.¹⁷⁶ Scott’s publications circulated not only in the United States but also abroad,

¹⁷³ Wilhelm Max Wundt. *An Introduction to Psychology*, reprint of 1912 ed. (New York: Arno Press, 1973), 128-130.

¹⁷⁴ Edmund C. Lynch, “Walter Dill Scott: Pioneer Industrial Psychologist,” *Business History Review* 42:2 (Summer 1968): 149-70.

¹⁷⁵ Edward Bradford Titchener, *An Outline of Psychology* (New York: Macmillan, 1899), 15. Titchener formally labeled his approach to psychology “structural.” Titchener believed that the aim of the psychologist was “(1) to analyze concrete (actual) mental experience into its simplest components, (2) to discover how these elements combine, what are the laws which govern their combination, and (3) to bring them into connection with their physiological (bodily) conditions.”

¹⁷⁶ Walter Dill Scott, *The Theory and Practice of Advertising: A Simple Exposition of the Principles of Psychology in Their Relation to Successful Advertising* (London: Sir Isaac Pitman and Sons, Ltd., 1907), 116-129. By 1907 Scott was full professor of psychology, and in 1909 he was appointed professor of advertising for the newly-established School of Commerce at Northwestern. Scott later became president of Northwestern University. Scott was one of the first to apply psychological principles to advertising. He published books and articles on psychology, advertising, business

where readers were interested in learning successful American advertising techniques. This introduction to the 1907 London edition of his influential book *The Theory and Practice of Advertising* gives a sense of how far Scott's book traveled, and how closely tied modern advertising was to the culture of the United States:

This book comes from America. But it is none the worse for that; on the contrary, the admitted supremacy of the Americans in the art of advertising gives them a right to assume the role of teacher. The writer of this work had made advertising the study of his life, and is acknowledged as the one authority on the subject in the United States. The success of the book in America encourages the publishers to anticipate a similar welcome from the advertising public in this country, for the fundamental principles underling advertising are universal.¹⁷⁷

Scott's advertising theory draws on Wundt's concepts of apperception and fusion, with an added dose of William James and other psychologists. Like Wundt, Scott conceived of apperception as a creative function of the mind on encountering stimuli in the environment. He wrote:

"The first thing to be said about apperception is that it is the act of the mind by which perceptions and ideas become clear and distinct. . . . The second thing to remark about apperception is that it is more than mere attention. It is attention of a particular kind. Our attention to an object or even is an act of apperception if the attention is brought about by means of the relationship of this object or event to our previous experience. Apperception has been defined as *the bringing to bear what has been retained of past experience in such a way as to interpret, to give weight to the new experience.*" . . . The third thing to notice about the process of apperception is that it increases our knowledge by gradually adding new elements to our previous store of experience." [Scott's emphasis]¹⁷⁸

Scott reflects Wundt's emphasis on the self-activity of the process of apperception. Thomson links Scott's work to Wundt's, and Wundt's to associationist theory of British empiricism.¹⁷⁹ But as Danziger explains, this placement of Wundt in a

management, and other topics from the early 1900s up to just before his death in the 1950s. See Lynch, 149-170.

¹⁷⁷ Walter Dill Scott, *The Theory and Practice of Advertising: A Simple Exposition of the Principles of Psychology in Their Relation to Successful Advertising* (London: Sir Isaac Pitman and Sons, Ltd., 1907), iv.

¹⁷⁸ Scott, 149-152.

¹⁷⁹ Thomson, 258-60.

line of development from British empiricism is mistaken. Wundt held that the process of apperception is larger than associationism, which depends on apperception to occur. Wundt believed that there were passive and active forms of apperception, both of which are “forms of volitional activity.”¹⁸⁰

American advertising psychologists of the early twentieth century were familiar with a principle Scott calls “fusion,” which he encountered in his studies with Wundt.¹⁸¹ Scott writes, “All these impressions, sensations, ideas, etc., are fused together and have no separate existence. Each plays a part in determining the whole conscious impression or condition, but the parts do not exist alone. It is a general law of psychology that *all things tend to fuse and only those things are analyzed that must be analyzed*. In the beginning we perceive objects as concrete wholes and then later analyze the wholes into parts.” [Scott’s emphasis]¹⁸² Applying the idea of fusion to advertising, Scott says, “The impression made by the illustration and that made by the text fuse and form a whole which is the result formed by these two elements.”¹⁸³ Scott provides several examples of unintentionally bad uses of the fusion principle, such as an ad for a brand of oats in a “hermetically sealed” package which is impervious to insects (fig. 16). The illustration shows a hoard of insects attacking the cereal package with axes and mallets. Although the ad copy emphasizes the benefits of the package, the specific words and pictures fuse in an overall negative impression of bug-infested cereal.

Scott cautions his readers, “The ordinary man and woman are not accustomed to critical logical thinking. They are not accustomed to consider an object or argument on its own merits and independent of all other things. They are more inclined to take objects, arguments, and events in their entirety. They fuse all the impressions of a particular

¹⁸⁰ Danziger, 78-9.

¹⁸¹ Walter Dill Scott, Ch. 7, “Fusion,” in *The Theory and Practice of Advertising: A Simple Exposition of the Principles of Psychology in Their Relation to Successful Advertising* (London: Sir Isaac Pitman & Sons, Ltd, 1907), 96-115.

¹⁸² Scott, 98.

¹⁸³ Scott, 107-108.

situation into one total impression, and are influenced by events in their totality without being able to analyze the elements which have united to form the whole.”¹⁸⁴

Scott’s lack of faith in the ability of the “ordinary man and woman” to engage in critical thinking parallels Kassák’s lack of faith in the masses to fail to envision and work toward a better future in “Picture-Architecture.”¹⁸⁵ Both emphasize motivating the ordinary masses not through appeals to reason but through fused or unified word and image.

In the conclusion to *The Theory of Advertising*, Scott states that he has introduced scientific principles and related them to good advertising practice, thus establishing “a scientific basis for the theory of advertising.” He further states, “The successful advertiser must be a psychologist. It may not be necessary for him to be able to formulate his system and he may never have studied in any school or under any instructor other than his practical experience. No matter how he acquires his knowledge of psychology, he must, at least, possess it.”¹⁸⁶

In his essay, “Advertisements,” Kassák echoes Scott, saying “The fundamentals of an effective advertisement are sociology and psychology.”¹⁸⁷ Whether or not he could “formulate his system,” as Scott puts it, Kassák was undoubtedly responding to the use of advertising psychology in the American advertisements in his 1928 essay “On the Road to Elementary Typography.” In this essay Kassák discusses the correct approach to making print advertisements, and strives to shift the advertising artist’s understanding of the form and function of print ads. “Creating advertisements is not primarily an art,” he writes. Neither is it an industrial art. Kassák takes to task designers who attempt to “struggle for pictorialness and self-enclosed creative art in both poster making and typography.” He writes, “A picture is perfect if it constitutes a self-enclosed, indivisible unit, while a poster, in contrast, is nearest to perfection when it is capable of making, with

¹⁸⁴ Scott, 115.

¹⁸⁵ Kassák, “Picture-Architecture,” 427-431.

¹⁸⁶ Scott, 232-33.

¹⁸⁷ Kassák, “Advertisements,” in Benson and Forgacs, *Between Worlds*, 622.

the most active force and the most effective form, an object not present real and when its creation proves not its own aesthetic uniqueness but the goodness, cheapness and unquestionable necessity of the article it advertises.”¹⁸⁸ Here Kassák proposes a radical realignment of attitude and practice for artists working for reproduction and mass communication. Do not think of an ad as a picture, he urges. Neither decorate a page of text, nor simply add words to a pretty picture. Words are visual elements, and visual elements can function *like words*. Use this dynamic interplay to make “an object not present real.” If an advertising artist can achieve this, he or she has managed to plant in the viewer’s mind a whole range of the product’s abstract as well as material qualities, and cause an array of possible benefits to blossom in the viewer’s awareness. Good art points away from itself to something larger—to greater possibilities.

In his chapter on perception, Scott points out that because the advertiser cannot bring the product itself to the customer, but must make use of “two kinds of symbols—printed words and pictorial illustrations” to make the commodity present. This idea parallels Kassák’s idea that a poster can make real an object not present.¹⁸⁹ About printed words, Scott writes, “There is no advantage in emphasizing the symbol [by which Scott here means the written word], but there is a great advantage in emphasizing the thing symbolized.”¹⁹⁰ Like Kassák, Scott makes a distinction between a “picture” and an “illustration.”¹⁹¹ Scott writes, “The illustration may perform either one or both of two functions. It may be a mere picture used to attract attention or it may be an ‘illustration’ and a real aid to perception by assisting the text to tell the story which is to be presented.”¹⁹² Also like Kassák, Scott finds that simple pictures are less powerful than multi-layered illustrations which are capable of carrying out the “double function of

¹⁸⁸ Kassák, “On the Road to Elementary Typography,” originally published in *Magyar Grafika (Hungarian Graphic Art)*, (May-June 1928):144-48, reprinted in Csaplár, *Lajos Kassák: The Advertisement and Modern Typography*, 11-12.

¹⁸⁹ Kassák, “On the Road to Elementary Typography,” 11-12.

¹⁹⁰ Scott, 140.

¹⁹¹ Kassák, “On the Road to Elementary Typography,” 11-12

¹⁹² Scott, 140.

attracting attention and assisting perception.” Recall that Kassák also recommended an advertising artist push beyond a simple picture with label to a more dynamic, evocative fusion.¹⁹³

Because the article “On the Road to Elementary Typography” was published in 1928, when Kepes was working with Kassák, we can assume Kepes was aware of it, and as a young follower he must have been included in the discussion it would have produced. More than that, we can assume that Kepes had the chance to observe Kassák carry out this approach in his work, and Kepes also learned to deploy Kassák’s approach in his own work for the *Munka* journal. A poster for *Munka*, designed and signed by Kassák, displays the orderly unity of words and pure visual elements melded for immediate effect which he supported (fig. 17). Other than a photograph at the center, this poster makes use of nothing other than letter forms and rules in order to make its impact. Sans-serif, lower case letters function as strong visual elements. An underlying rectangle-based grid gives structure to the dynamic, asymmetrical composition. The photograph shows workers building structures, appropriate for a publication titled *Work (Labor)*. The focus of the photograph is a mason working at the peak of a ziggurat-like edifice, suggesting that ordered, structured effort results in man achieving the pinnacle. The September 1928 issue of *Munka* uses a similar red and black design formed strictly of rules, bullets, letterforms, and one large red rectangle (fig. 18).

In *Language of Vision*, Kepes exhibits an understanding of concepts of apperception and fusion that share with Wundt, Scott, and Kassák an emphasis on the participation of the viewer in making unified meaning from external stimuli. Kepes wrote:

Advertising art pioneered in testing representative images in combination with pure plastic units and verbal elements. Apollinaire in his ideograms, Miro [*sic*] in his painting-poem incorporate the written word in the plastic ensemble with a dynamic interaction of the verbal significance and the sensory qualities of the pictorial elements. These painters are fusing the two into one expression that evokes associations of great depth because of the sensory intensity of plastic values, and of great width because of the associations discharged by the linguistic basis. Color, shape, and texture, line, and symbol attain an organic unity and thus

¹⁹³ Kassák, “On the Road to Elementary Typography,”

train the spectator to form into an organic whole his own experiences of the divergent qualities.¹⁹⁴

Kepes's use of the terms association and fusion may be less precise than Wundt's or Scott's, and he does not use the term apperception; but he clearly shares in their understanding of these concepts. Interesting is his crediting advertising with pioneering a blend of picture, word, and "pure plastic units."

The entire chapter "Toward a Dynamic Iconography," which includes the quotation above, reveals that Kepes's understanding of modern perception psychology underlies at a deep level his concept of how people perceive, organize, and respond to what they see. The whole trajectory of this chapter, the most original and significant of the book, is propelled by the idea that people make meaning from what they see in ways that strongly recall Wundt's and Scott's psychology. Kepes insists that artists must "liberate the inexhaustible energy reservoir of the visual associations" to cause (even force) the viewer to make meaning and from this meaning, shape new attitudes.¹⁹⁵ Referring to School of Design teacher Nathan Lerner's photomontage composed of barbed wire and an eyeball on a background of rocky dirt, Kepes writes, "We look at the photograph of an eye stuck in mud and see in the same picture barbed-wire. The contradiction inherent in the associations of the respective elements keeps our mind moving until the contradiction is resolved in a meaning; until that meaning, in turn, becomes an attitude toward things around us and serves as ferment for protest against life under inhuman conditions." (fig. 19) ¹⁹⁶ Kepes's viewers force eye, mud, and wire into a meaningful unity in the same way that Scott's viewers fuse text, product, and insects in the cereal advertisement, and like Kassák's viewers, are moved to develop new attitudes and expectations.

From his essays about American advertising and the importance of the effective use of psychology, we can assume that Kassák was familiar with the theory and practice of American-style advertising, and clearly supported this approach to a new vision. We

¹⁹⁴ *Language of Vision*, 207, 209.

¹⁹⁵ *Language of Vision*, 201-2.

¹⁹⁶ *Language of Vision*, 202.

can confidently assume that Kepes was exposed to Kassák's theory and practice, and drew from this background for *Language of Vision*.

CHAPTER 4

NEW VISION IN BERLIN AND GESTALT IN LONDON

In this chapter, as in the previous one, I present Kepes's experiences with his mentors (this time in the cities of Berlin and London) who introduced him to certain holistic theories, and provided examples of social conscience. These holistic approaches and social activism Kepes applied to visual art and to examples of advertising as seen in *Language of Vision*. I will establish the ideas that emerged from Kepes's period in Berlin and London (1930-1937). Kepes's experience in both cities was related due to three factors: in both places he worked as a colleague of Moholy-Nagy; the work he undertook in both cities was directed to very practical ends—to earn a living; and both Berlin and London afforded him the chance to meet international figures in the arts and sciences. Work in both cities focused on the practical application of theories, but the London phase is distinguished by his introduction to new theories that will find their place in *Language of Vision*.

Kepes's time in Berlin (1930-32, 1934-35) was a period of transition during which he applied what he had absorbed from his experience in Budapest, and integrated Moholy-Nagy's ideas as expressed in his essay "Typo-photo" in particular. In Berlin Kepes had the chance to meet a number of distinguished artists, designers, and filmmakers, but this was highly practical, production-oriented time, interrupted by a year-long illness spent with family in Transylvania.¹⁹⁷ His London phase also focused on practical production of design jobs and allowed him to meet another group of international significance, a circle of scientists and writers who presented him with both new concepts and new ways of responding to one's social conscience.

¹⁹⁷ Kepes interview with Dorothy Seckler.

I delineate these scientists' approach to theoretical biology, especially emphasizing the role of Gestalt psychology in forming new paradigms for their projects. I demonstrate that Kepes saw himself as participating in an analogous revolution in seeing and representation, as he discusses in *Language of Vision*, a large portion of which is based on Gestalt concepts. I argue that despite the antithetical precepts underlying theories of perception in Gestalt and Wundtian psychology, Kepes combined aspects of each into his own holistic beliefs, and, understanding that this holistic continuity was compatible with a sense of social concern, he applied these ideas to visual communication, as we can see in *Language of Vision*.

In 1930, Kepes decided to abandon painting and work with new media, specifically the motion picture, because he felt the socially-conscious messages he wished to convey were more effectively delivered through film.¹⁹⁸ He had read Moholy-Nagy's books, most likely *Malerie, Fotografie Film (Painting Photography Film)* and *Von Material zu Architektur (The New Vision)*, and wrote a long letter to him, saying that he had quit painting and wanted to make films. Moholy-Nagy introduced the thesis in *Malerie, Fotografie Film* that the shaping of vision through technologically modern means—cameras with micro- and macro- lenses, x-rays, syntheses of text and image made possible through new methods of reproduction—held out dynamic possibilities for a humane new world. This approach, repeated by Moholy-Nagy and further shaped by others' theoretical discourse, came to be called New Vision (*Neues Sehen, Neue Optik*).¹⁹⁹ Moholy-Nagy responded to Kepes with an invitation to work with him in Berlin. The 1920s as a time for developing and learning design theories in an academic setting—those Kassák instilled in Kepes, and those Moholy-Nagy worked out at the Bauhaus—was finished. Both Kepes and Moholy-Nagy left behind the academic world to take up the hard practicalities of making their livings as commercial designers.²⁰⁰

¹⁹⁸ Seckler interview, Aug. 18, 1968.

¹⁹⁹ Witkovsky, 15-16. Christopher Phillips, "Resurrecting Vision: The New Photography in Europe Between the Wars," in *The New Vision: Photography Between the World Wars* 65-108, (New York: Metropolitan Museum of Art, 1989), 65-66.

²⁰⁰ Krisztina Passuth, *Moholy-Nagy* (New York: Thames and Hudson, 1985), 61.

Accepting Moholy-Nagy's invitation, Kepes moved to Berlin in 1930 and became part of a group of young photographers and artists associated with New Vision photography, many from his native Hungary. Among them were photographer Eva Besnyő (1910-2003) and Robert Capa, born Endre Ernő Friedmann (1913-1954), later a photojournalist and *Life* magazine correspondent known for his photographs of the Spanish Civil War and D-Day. In Budapest Besnyő had been a student of Jozsef Pésci (1889-1956) prior to her arrival in Berlin the summer of 1930, and Capa had been taking part in demonstrations against the Horthy regime in which the Kassák circle was involved. Besnyő and Kepes were together almost constantly for the first six months of her time in Berlin. She worked as a photography assistant and then opened her own studio in the summer of 1931. Kepes, as informal mentor to Capa, joined him and other young people in his apartment, guiding lively discussions of politically engaged art and current events.²⁰¹

Although immersed in this dynamic young photography scene, Kepes's goal was to make films, and he was disappointed to discover that Moholy-Nagy could offer few

²⁰¹ Diethart Kerbs, "Zwei junge Ungarn in Berlin, 1930-1932," in *Eva Besnyő – György Kepes mit Anderen Augen: Berlin 1928-1930*. Series Edition Photothek XX (Berlin: Dirk Nishen Verlag, 1987), 29. (This title is corrected on an errata page. Title should be 1930-32, not 1928-1930.) "Besnyő came to Berlin in September 1930. She worked in the advertising studio of René Ahrlé. From Feb. to July 1931 she worked with photographer Dr. Peter Weller. In summer 1931 she had a studio with darkroom in Nacodstrasse, and was independent." (My translation.) Witkovsky, 81. Other young Hungarians of this circle were Martin Munkacsí, Janos Reismann, and Judith Kárász.

On Robert Capa and his relationship with Kepes, Christian Bromig writes, "In his small room in a pension in Berlin he met frequently with friends for lively discussions on politics and art for hours. It was also György Kepes who—to a certain extent as mentor—made the seven-years-younger Endre Friedmann familiar with the ways of thinking of the intellectual left and politically engaged art." Christian Bromig, "Ästhetik des Augenblicks: Ungarische Fotografen in der Bildpresse der Weimarer Republik" ["Aesthetics of the Instant: Hungarian Photographers in the Picture Press of the Weimar Republic"] 501-521 in *Wechsel Wirkungen, ungarische Avant-garde in der Weimar Republik*, ex. cat., Neue Galerie, Kassel (Marburg: Jonas Verlag, 1986), 516. My translation.

real opportunities to do that. Kepes hoped that film would allow him “to use visual images or visual forms to communicate ideas that have concrete meaning to the people I’m intending to speak to.”²⁰² He wrote a film script on the life of Rozsa Sandor, a Hungarian peasant Robin Hood-like hero of the Hungarian Revolution of 1848.²⁰³ About this script, Kepes said, “I thought I can make a film where the general structural pattern of the film will be almost like a constructivist pattern, with very strong juxtaposition of absolutely unrelated areas.”²⁰⁴ Moholy-Nagy could offer Kepes few solid possibilities for technical training in filmmaking. Kepes helped produce Moholy-Nagy’s short abstract film *Lightplay: Black White Gray* (1930), and created the title and credits.²⁰⁵ Through Moholy-Nagy, Kepes did have an opportunity to meet and talk with visiting avant-garde filmmakers Sergei Eisenstein, Aleksander Dovschenko, Vsevolod Pudovkin, and Dziga Vertov, and he “made a point to keep contact with them.”²⁰⁶

Kepes’s relationship with Moholy-Nagy was that of collaborator or colleague rather than employee.²⁰⁷ Kepes worked with Moholy-Nagy on the scenery for the Hindemuth operetta *Hin und Zurück*, 1930, and *Madame Butterfly*, 1931. He worked with Moholy-Nagy’s sculpture *Light-Space Modulator*, used in the film *Lightplay: Black-White-Gray*. Kepes produced graphic design work for Herbert Beyer’s publication *Neue Linie*, as well as advertising work. He also took over from John Heartfield the design work for *Das Neue Russland (The New Russia)* and according to Andreas Haus, thereby

²⁰² Seckler interview, Aug. 18, 1968.

²⁰³ Judith Wechsler, Jan van der Marck and György Kepes, 87.

²⁰⁴ Seckler interview, Aug. 18, 1968.

²⁰⁵ Heidrun Schröder-Kehler, “Künstler erobern die Warenwelt: Neue Typographie in der Werbegestaltung,” 388-412, in *Wechsel Wirkungen, ungarische Avantgarde in der Weimar Republik*, ex. cat., Neue Galerie, Kassel (Marburg: Jonas Verlag, 1986), 406.

²⁰⁶ Seckler interview Aug. 18, 1968. Terence A. Senter, “Moholy-Nagy: The Transitional Years” in *Albers and Moholy-Nagy: From the Bauhaus to the New World* (London: Tate, 2006), 85.

²⁰⁷ Senter, *ibid.*

amplified his understanding of Soviet graphic design, propaganda, and film work, which he had previously developed in Budapest.²⁰⁸

In 1932, Kepes developed a streptococcus infection of his heart and had to return to Hungary for almost a year of bed rest at the Transylvanian estate of his sister and brother-in-law.²⁰⁹ Moholy-Nagy invited him to go back to work with him in Berlin, but when he returned in 1934, he found that most of his contacts there had gone or been “eliminated” by the Hitler regime. Moholy-Nagy himself felt the pressure of the fascist regime and prepared to move to Amsterdam to work for Pallas Studio as the art director of the trade publication *International Textiles*. He turned his Berlin office over to Kepes to run, and he also gave him design projects for the international textile magazine.²¹⁰ Kepes recalled, “I did mainly commercial work, book jackets, magazine covers, advertising, but I still could sneak in, just for fortunate personal reasons, very micro-scale attempts to try out some film experimentation.” He knew Dr. Bela Gaspar, the Hungarian inventor of the color film process, who offered Kepes the chance to experiment with the color process (Gaspar-Color) to produce an animated film. The Gaspar-Color group intended such short experimental films to be used to sell the process to larger filmmakers. Kepes attempted to make a film based on Hans Christian Anderson’s *The Emperor’s New Clothes*, but with Hitler’s rise to power in 1933, such a subject was risky.²¹¹ This chance

²⁰⁸ Andreas Haus, “Fotografie,” 472-489, in *Wechsel Wirkungen, ungarische Avant-garde in der Weimar Republik*, ex. cat., Neue Galerie, Kassel (Marburg: Jonas Verlag, 1986), 478. Senter, “Moholy-Nagy: The Transitional Years,” 85.

²⁰⁹ Seckler interview, Aug. 18, 1968.

²¹⁰ Senter, “Moholy-Nagy: The Transitional Years,” 86. Brown interview with Kepes, Aug. 30, 1972, 8, 9. Seckler interview, Aug. 18, 1968.

²¹¹ Brown interview with Kepes, Aug. 30, 1972, 8. Kepes said, “I made a great number of cartoons for the different characters, and I made, I kept some of them out and I can give them for the files, for instance I used every soldier as a transparent head, having the helmet inside rather than outside, and the whole idea was to crucify dictatorship, and show fakes in life. But I really never could make the film, because it had no money, no political chance to realize it. but it gave me some opportunity to try out playing with film material.” On Moholy-Nagy’s plans to work with Gaspar-Color in 1944, see Jeannine Fiedler and Hattula Moholy-Nagy, eds., *László Moholy-Nagy: Color in Transparency: Photographic Experiments in Color* (Göttingen: Steidl, 2006), 80.

to experiment must have been a rare thing for Kepes in his Berlin years, which were crammed, as we have seen, with deadline-driven commercial work.

I have discussed some of Kepes's work in terms of Kassák's ideas about advertising and design for commerce. I will now look at one of the few existing examples of Kepes's Berlin work in terms of Moholy-Nagy's design philosophy, in particular his essay "Typo-photo" from *Malerie, Fotografie Film (Painting Photography Film)*. Like Kassák and Lissitzky, Moholy-Nagy believed "[i]llustrated papers, posters and . . . display printing" led the way through their use of photography not only to illustrate words, but to stand in place of words. Moholy-Nagy points to American magazine design as the model for advanced print communication which will not be linear, as typography had been from Gutenberg's day. New photographic technologies will allow "modern synoptic communication" which will operate in a "directly visible—not only in an indirectly intellectual—fashion." This new form of communication he calls "typophoto" and of it he writes, "The form, the rendering is constructed out of the optical and associative relationships: into a visual, associative conceptual, synthetic continuity: into the typophoto as an unambiguous rendering in an *optically* valid form."²¹² In his emphasis on association, Moholy-Nagy's echoes Walter Dill Scott's writing on the association of ideas in *The Theory and Practice of Advertising*. While Moholy-Nagy does not specifically mention the psychological principle of fusion, it is possible to see in his "synthetic continuity" Scott's advertising application of the fusion concept at work. Explaining this concept, Scott writes:

At any point of time we may be receiving impressions of sight through the eyes, impressions of sound through the ears, impressions of hunger or thirst from the body, and at the same time we may be thinking of former experiences. All these impressions, sensations, ideas, etc., are fused together and have no separate existence. Each plays a part in determining the whole conscious impression or condition, but the parts do not exist alone. It is a general law of psychology that *all things tend to fuse and only those things are analyzed that must be analyzed.*

²¹² László Moholy-Nagy, "Typophoto," in *Painting Photography Film* (Cambridge, Mass.: MIT Press, 1969), 38-40.

In the beginning we perceive objects as concrete wholes and then later analyze the wholes into parts.” [Scott’s emphasis]²¹³

Through combination of image, text, and graphic elements, each intended to invoke other positive associations on the part of viewers, Kepes’s 1931 and 1932 covers for the journal *Das neue Russland* supported the journal’s mission to promote a favorable view of the U.S.S.R.’s culture, economy, and literature to a German audience. In Berlin, years earlier than his explication of the process in *Language of Vision* as both fusion and Gestalt unity, Kepes here succeeds in setting disparate elements and their manifest associations in relationships that one might see as illustrative of Wundt’s and Scott’s “concrete wholes.”

The cover of the November 1931 issue, for instance, uses a photograph of a row of gleaming industrial silos seen from an angle (fig. 20). A smokestack cuts across the page from bottom to top at a slight angle, and other elements such as walkways and stairs form diagonals of yet other degrees. All these diagonal elements fan upward and outward from an area at the bottom edge of the page where they appear to be anchored. Kepes placed the words “USSR Das neue Russland” on an opposing slight diagonal, reinforcing the impression of dynamic strength. The letters “USSR” dominate in size all other text. This typeface recalls stenciled letters used for industrial or commercial applications. Closely spaced below “USSR” are the sans-serif, upper-case words “Das neue Russland,” justified at far right with the R of “USSR,” thereby forming a unit of the two lines of type. This simple, bold, engineered typeface is freighted with connotations of machine-age modernity. The letter “R” of “USSR” is separated from the preceding “S” by the placement of the smokestack, which functions as a fulcrum or perhaps more accurately, a flagpole from which the words stretch out like a flag in a strong breeze. To the left behind the photo a light-colored curved graphic element sweeps upward from the top of the stacks, making the view of the deep sky behind the stacks to appear as a partial circle, thus emphasizing the overall upward-and-outward motion. The viewer, taking in the

²¹³ Walter Dill Scott, *The Theory and Practice of Advertising: A Simple Exposition of the Principles of Psychology in Their Relation to Successful Advertising* (London: Sir Isaac Pitman and Sons, Ltd., 1907), 98.

cover at a glance, would perceive a unified whole that conveys a message of the U.S.S.R.'s powerful industrial achievement, and its aspiration to the skies.

In May 1935 Moholy-Nagy went to London to work with the publicity agency for International Textiles, which had set up an office there. Shortly afterward, Kepes, joined him.²¹⁴ As in Berlin, the focus of his work was practical. Kepes recalled, "It was a straight commercial enterprise with the idea to do whatever job we can do without making major compromises." Moholy-Nagy made many contacts and began to bring in commercial design work for such companies as Imperial Airways and London Transport. He also took a position as director of display at the new menswear store Simpson's in Saville Row. In spite of the need to devote many hours to what Kepes called "unexciting work," Moholy-Nagy managed to carry out some film and photography work, and Kepes was able to make the acquaintance of a wider group which included scientists and writers.²¹⁵

Through a book design project Moholy-Nagy took on for the science writer James Gerald Crowther (1899-1983), Kepes met a circle of politically- and socially-active scientists whom he credited with profoundly affecting his outlook. Crowther and his German-speaking wife often invited Kepes to their house for dinner, which helped acclimate him to a new country where he did not know the language. The couple also introduced him to many people, and gave him "a new vista for the world." Besides Crowther, whom Kepes called his mentor, the group included geneticist John Haldane, (1892-1964), physicist John Desmond Bernal (1901-1971), biochemist and historian Joseph Needham (1900-1995), and geneticist C. H. Waddington (1905-1975). Kepes was impressed that these people were "not only imposing minds in their own fields, but they were also full human beings" with an "inner completeness" who were committed to causes outside their fields, particularly the Spanish Civil War.²¹⁶ "And this type of

²¹⁴ Jacob Dabrowski and Maeve Polkinhorn, "Chronology," *Albers and Moholy-Nagy: From the Bauhaus to the New World* (London: Tate, 2006), 166. Brown interview, 9.

²¹⁵ Brown interview, 9.

²¹⁶ Brown interview, 9.

attitude of a scientist, that he's not just looking . . . in the terms of their own isolated field, but looks at connections in society, science, in human individuals, and in society and science, . . . impressed me very much." Kepes explained to the interviewer that this experience made him "confident that there is a task to find links between science and art."²¹⁷

These scientists were members of the Theoretical Biology Club, colleagues who, as Kepes emphasized to the interviewer, were not only eminent in their specialized fields, but who had an abiding interest in examining wider connections of science to art, history, politics, and social concerns. In her book *Crystals, Fabrics and Fields: Metaphors That Shape Embryo*, Donna Jeanne Haraway studies the thought of Theoretical Biology Club members Joseph Needham, Ross G. Harrison and Paul Weiss whom she believes implemented during the 1930s a "paradigm switch" of great significance to twentieth-century science. A closer look at this group will afford insight into premises underlying *Language of Vision*, because the paradigm embraced and the metaphors used to understand developmental biology have parallels in Kepes's thought.

I will first define the idea of paradigm shift or switch, then look at metaphor in Needham's and others' work. I then discuss corresponding ideas in Kepes's book. For these scientists, a change in paradigm involves a shift from mechanist or vitalist metaphors to organicist metaphors of crystals or fields. For Kepes, this shift moves from art as Renaissance-view-through-a window to images in relationship, as in film or advertising art. I will then discuss an understanding of form as structured dynamic relationships, a further parallel for both the Theoretical Biology Club and Kepes. For Needham and his fellow scientists, this is expressed in what Haraway calls "organicist structuralism."²¹⁸ While Kepes gives no particular name to the structural interest he expresses in *Language of Vision*, his understanding is similar. Finally, I will discuss Gestalt psychology which provides both the British scientists and Kepes with approaches to field and wholeness concepts. Kepes and his scientist friends share further

²¹⁷ Brown interview, 10.

²¹⁸ Haraway, 61-63.

characteristics of a highly developed social concern and a willingness to explore connections between science and art.

Haraway uses the concept of paradigm first developed by Thomas Kuhn in the seminal book *The Structure of Scientific Revolutions* (1962).²¹⁹ Kuhn holds that scientists operate within a community which accepts a jointly held world view primarily supported by observation and experience, but also inclusive of an inevitable “arbitrary element, compounded of personal and historical accident.” The community supports a particular paradigm, suppressing anomalies. When the scientific community can no longer ignore the anomalies within the paradigm, a scientific revolution ensues, setting up new problems and solutions that were undreamed-of under the old paradigm. A switch or shift to a new paradigm ensues.²²⁰ The related concept of metaphor Haraway bases primarily on Mary Hesse’s *Models and Analogies in Science*.²²¹ Part of the wider concept of paradigm, a metaphor is a verbal or visual image, usually of a concrete object such as machine or crystal, that “gives concrete coherence to even highly abstract thought.”²²²

Haraway shows how the scientific community of the Theoretical Biology Club of the 1930s in Cambridge, England sensed an unsustainable tension between the older paradigms of mechanism, the idea that living things can be understood as made up of individual parts lacking any intrinsic relationship to one another, whose matter follows natural and mechanical laws; and vitalism, the idea that the life-force in organisms is self-sustaining and independent of the laws of physics and chemistry. The new “third way” developed by Needham and the others was called organicism, the idea that living things are organized in systematic, self-regulating wholes in which parts assume their importance only through their relationship to other parts. Possibly the first person to call

²¹⁹ Thomas Kuhn, *The Structure of Scientific Revolutions*, 2nd ed. 54-272. In Otto Neurath, Rudolf Carnap and Charles Morris, eds., *Foundations of the Unity of Science* vol. II, no. 2. (Chicago: University of Chicago Press, 1970).

²²⁰ Kuhn, 63-71.

²²¹ Mary Hesse, *Models and Analogies in Science*, South Bend, Ind.: University of Notre Dame, 1966.

²²² Haraway, 9, n. 8.

himself an organicist was Haldane, one of the circle of London scientists Kepes was acquainted with.²²³

These scientists saw connections between and among growing organisms and art-oriented concepts of form; symmetry, polarity, and pattern; and fields and particles which they shaped into a new theoretical model for developmental biology. Haraway writes, “Their attention to aesthetic standards and the problem of form was no accident. . . . The structure-function and part-whole relations, understood in a constant dialectic interplay, constitute the cornerstone of the developmental edifice.”²²⁴ Needham and the others abandoned mechanism, the machine-like paradigm for developing embryos and also the metaphysical model vitalism, replacing them with a new paradigm of form “conceived as the totality of structured relationships unfolded in development.”²²⁵

Kepes’s most succinct statement identifying his adoption of organicist beliefs appears in his first chapter, where he adapts the language of organicism to a discussion of the plastic image:

The experience of a plastic image is a form evolved through a process of organization. The plastic image has all the characteristics of a living organism. It exists through forces in interaction which are acting in their respective fields, and are conditioned by these fields. It has an organic, spatial unity; that is, it is a whole the behavior of which is not determined by that of its individual components [as in mechanistic theory], but where the parts are themselves determined by the intrinsic nature of the whole. It is, therefore, an enclosed system that reaches its dynamic unity by various levels of integration; by balance, rhythm and harmony.²²⁶

In addition, Kepes traces a similar abandonment of old paradigms and development of new in the visual arts, and he too adopts a new metaphor for the image. In *Language of Vision*, Chapter 2 addresses the primary ways in which artists have

²²³ Haraway 36. J. S. Haldane may be the first to call himself an organicist in *Organism and Environment* (1917), based on a course of lectures delivered at Yale.

²²⁴ Haraway, 42.

²²⁵ Haraway, 44-45.

²²⁶ *Language of Vision*, 16.

historically handled representation to convey spatial experience.²²⁷ Old forms of spatial representation must give way to a new paradigm. Kepes traces the breakdown of the Renaissance convention of fixed perspective. The old paradigm of a “window on a world” was under pressure due to the effects of the industrial revolution, which provided technologies such as cameras, special lenses, and motion pictures which altered vision. Kepes writes, “The new objects and new devices had brought to the visual field a wealth of new material. There were a thousand new things to see and a thousand new ways of seeing, but most of these were also wasted because there was no ordering principle established to organize the new visible world.”²²⁸ Furthermore, the industrial revolution also caused humans to be subject to their own machines. Kepes writes, “The human being himself became lost in his own evaluation of an object able to produce another object. The mechanical nature of the whole social and economic existence was assimilating man.”²²⁹ Twentieth-century artists sought solutions to confusion over a new visual world and the search for a “new structural order” in the art of past cultures, primitive art, and children’s art, in geometric shapes in precise relationships and in many other ways. Still, according to Kepes, there is more to be sought and expressed, not through “created units.”²³⁰

In the section of the *Language of Vision* entitled “The Process of Making,” Kepes replaces old paradigms of representation, both Renaissance and twentieth-century, with a new understanding of the “processes of becoming.”²³¹ He emphasizes concepts of making, process and development, offering them as new paradigms for art, situating this new approach squarely in the Theoretical Biology Club’s arena. He asserts that humans, having mastered technology, found that all visible traces of the origin of a form or the process of its making are exterminated. With connections between humans, the work of

²²⁷ *Language of Vision*, 65-199.

²²⁸ *Language of Vision*, 93.

²²⁹ *Language of Vision*, 92-93.

²³⁰ *Language of Vision*, 94-98, 108.

²³¹ *Language of Vision*, 186-199.

their own hands and nature broken, humankind feels the need for “renewed contact with the pulsation of the dynamic forces of nature processes.” He states:

[Humankind] recognized that scientific technological progress needed to be reevaluated in biological dimensions. Instead of the old fixed point of perspective, he developed, to meet his need, the perspective of growth instead of static order, the dynamic rhythm. The artist rediscovered nature. But he turned away from the naturalistic representation of the forms of the trees, flowers, and animals, and took as his new subject-matter the visible *processes of the growth*. [my emphasis]²³²

Kepes’s provided minimal captions for illustrations of the process of making. He leaves it to the reader to find evidence of the processes of making that have produced each image. A photograph of footprints in sand calls to mind the process of walking, and another of layered and worn circus posters recalls processes of repeated pastings and weathering (fig. 21). Patterns of curved lines in a dance diagram by Hogarth or in seventeenth-century calligraphy appear as two-dimensional transcriptions of bodily motion (fig. 22)

In an interesting inversion of the Theoretical Biology Club’s artistic metaphors for living things, Kepes uses the metaphor of a “living organism” for “the plastic image.” In Chapter 1 he considers “the laws of its growth and structure” of this living organism.²³³ As Kepes’s search for form ran through fields of science, so scientists’ search for form ran through the field of art. Haraway writes, “At different critical points in the history of biology, the allegiance to concepts of organic form, borrowed heavily from poets and artists, guided the scientist’s resolution of theoretical and empirical matters.”²³⁴ For Needham, “form is conceived as the totality of structured relationships unfolded in development.”²³⁵

Both Kepes and Needham and the Theoretical Biology group found in Gestalt psychology useful possibilities for re-conceiving their areas of interest. The work of

²³² *Language of Vision*, 196.

²³³ *Language of Vision*, 16, 66.

²³⁴ Haraway, 40.

²³⁵ Haraway, 44-45.

Wolfgang Köhler in particular had applications to both art and embryology. A key concept of Gestalt psychology is that of the configuration: the notion that the relationship of elements which constitutes the whole, and that the whole is not a simple, additive concretion. Related to this is the notion of the field, a concept Gestaltists took from physics.²³⁶ Haraway writes, “In the late 1920s Köhler applied Gestalt theory to embryological problems. He emphasized that the whole whose primacy over its parts changed their character, [and] could not be understood by an additive process. . . . Köhler saw Gestalt theory as a third way beyond the limitations of mosaic mechanist theories and the supraorganismic principles of vitalism.”²³⁷

Kepes, too, saw the possibility of applying Gestalt concepts to his area of concern, as did many other artists of the 1930s and 1940s.²³⁸ In *Language of Vision*, he acknowledges his indebtedness to Max Wertheimer, Kurt Koffka, and Wolfgang Köhler for concepts as well as actual illustrations used in his book. In Chapter I, “Plastic Organization,” Kepes sets up conditions of seeing, utilizing concepts of fields and forces drawn from Gestalt psychology.

In his application of the concepts of field and force, Kepes makes a distinction between external forces and fields (which he also calls “frames of reference”) and internal forces and fields. That is, Kepes calls the things we look at “optical forces” operating in an “external field.” These forces work on the eyeball and the mind itself, an “internal frame of reference” or field. Kepes explains, “The forces of visual attraction—a point, a line, an area—exist in an optical background and act on the optical field. This optical field is projected on the retinal surface of the eyes as an inseparable background for the distinct visual units. One can not therefore perceive visual units as isolated entities, but relationships.”²³⁹

²³⁶ Koffka, *Principles of Gestalt Psychology*, 41-42, 47. Haraway notes that for developmental biologists, the field concept had other sources as well. Haraway, 54-61.

²³⁷ Haraway, 56.

²³⁸ See Karen Bearor, *Irene Rice Pereira: Her Paintings and Philosophy* (Austin, TX.: University of Texas, 1993), 75-79. Rudolf Arnheim, “Gestalt and Art,” *The Journal of Aesthetics and Art Criticism* 2, no. 8 (1943): 71-5.

²³⁹ *Language of Vision*, 16, 17.

In Chapter 1, Kepes emphasizes the concept of dynamic equilibrium in relation to forces and fields, relating it to the possibility of creating the sensation of space through the “tensions” resulting from the relationships of two-dimensional forms on a plane.²⁴⁰ Throughout his Plastic Organization chapter, Kepes shapes his discussion along the lines of Gestalt psychology as summarized by Koffka: “It has become apparent that the true solution [to the problem of “why do things look as they do?”] without being in the least vitalistic, cannot be a machine theory based on a sum of independent sensory processes, but must be a thoroughly dynamic theory in which the processes organize themselves under the prevailing dynamic and constraining conditions.”²⁴¹

Following the Gestalt psychologists, Kepes adopts certain Gestalt optical “laws” to serve as “laws of plastic organization” which he applies to two-dimensional design.²⁴² His discussion of “Nearness” applies in a general way the Gestalt “law of proximity,” and he illustrates it with a figure taken from Koffka (fig. 23). He states, “[T]he proximity of optical units is the simplest condition for a crystallization of unified visual ‘wholes.’ We articulate a painting, a typographical design, first of all by the law of proximity. Optical units close to each other on a picture-plane tend to be seen together and, consequently, one can stabilize them in coherent figures.”²⁴³ In his section “Similarity or equality,” he states, “We also tie elements into stable relationships if they have common qualities. Equal sizes, similar shapes, directions, corresponding colors, values, textures, also produce the dynamic tendency to be seen together.” This idea is called the “proximity and equality” in Gestalt psychology.²⁴⁴ Similarly, Kepes’s “Continuance” parallels Gestalt’s “Good continuation,” and his “Closure” corresponds to Gestalt’s “Closure.”²⁴⁵

²⁴⁰ *Language of Vision*, 36, 43.

²⁴¹ Kurt Koffka, *Principles of Gestalt Psychology* (New York: Harcourt, Brace, 1935), 105.

²⁴² *Language of Vision*, 44.

²⁴³ *Language of Vision*, 46; Koffka, 164.

²⁴⁴ *Language of Vision*, 47; Koffka, 164-67.

²⁴⁵ *Language of Vision*, 49, 51; Koffka, 153, 167-68.

Gestalt psychology offered more to Kepes than perceptual laws. Rudolf Arnheim emphasized that the misused slogan “the whole is greater than the sum of its parts” wrongly limits Gestalt psychology, and consideration must be given to dynamic processes of whole and components that tended to work toward equilibrium across the field.²⁴⁶ In a section near the end of Chapter 1, called “The life-span of the plastic image,” Kepes asserts that an image with static relationships cannot hold our attention and will die or lose efficacy. “For the image to remain a living organism, relationships within it must be constantly changing. . . . Only this changing variety can provide the stimulation necessary for holding attention upon the picture surface.”²⁴⁷ Kepes turns to musical concepts to answer the need for changing visual relationships to sustain the life of the image as organism, and to thereby sustain the attention of the viewer. Rhythmic organization produces a “dynamic unity” that is time-defined.²⁴⁸ As with Renaissance depictions of space, traditional uses of rhythmic patterns have become static, and it is film, states Kepes, that offers the most potential to explore the potential of rhythm. Recalling his early interest in film (and his lack of opportunity to follow it), Kepes states, “The invention of the motion picture opened the way to a hitherto undreamed scope and flexibility of rhythmic organization. The new possibilities of the synchronization of the temporal and spatial structure of the vision are, however, still barely touched upon.”²⁴⁹

In addition to rhythm, progression, a quality of movement in the image like that of melody in music, is necessary in order to prolong the “life span of the image.” Kepes writes, “The final task of plastic organization is, then, the creation of an optical structure of movement that will dictate the direction and progression of plastic relationships until the experience reaches full integration.” This integrated direction and progression (Kepes calls it “organization of spatial progression”) is most characteristically observed in

²⁴⁶ Rudolf Arnheim, “The Two Faces of Gestalt Psychology,” *American Psychologist* 41, no. 7 (July 1986): 820-824.

²⁴⁷ *Language of Vision*, 52.

²⁴⁸ *Language of Vision*, 54.

²⁴⁹ *Language of Vision*, 58.

qualities of line or shape that lead the eye around the picture plane and give the image a sense of directed flow.²⁵⁰

Because of the proximity of his ideas to those of Gestalt psychologists and organicist scientists, we can see that Kepes's thought is structuralist in the small-s sense. Haraway sees an "organicist structuralism" in the work of Needham, Waddington, and others. She defines organicist structuralism according to the criteria established by Jean Piaget. "Structure is a system of transformation" that partakes of "three key ideas: the idea of wholeness, the idea of transformation, and the idea of self-regulation."²⁵¹ By Piaget's definition, Gestalt is "a type of structure," although it lacks certain qualities important to a true structure. Similarly, Kepes's notions of "plastic organization" exhibit a structured quality clearly shaped by his understanding of Gestalt and his awareness of the interests of his British scientist friends.

I have argued that advertising psychology drawn from the work of Wundt informed the theory and practices of Kassák, Moholy-Nagy, and Kepes. But traditionally, Gestalt concepts such as those Kepes uses in *Language of Vision* are seen as strongly opposed to the psychology of Wundt (discussed in the previous chapter in relation to the advertising psychology of Dill). The relationship had been set up as Gestalt psychology with interests in wholeness opposed to empiricists (with whom Wundt had been linked) with their tendency to break concepts down through analysis into parts. Mitchell G. Ash points out that Gestalt psychologists did not oppose Wundt or any particular individual, but rather "the elementistic and mechanistic assumptions about consciousness" of the late nineteenth century.²⁵² How can these two psychological approaches be compatible enough for Kepes to blend them? I argue that his interest in holistic systems caused Kepes to unite these ideas, allowing him to subsume the concepts of association and fusion, in particular—so prevalent in advertising—to his overarching

²⁵⁰ *Language of Vision*, 59-63.

²⁵¹ Haraway 61-63; Jean Piaget, *Structuralism*, trans. and ed. Chaninah Maschler (New York: Basic Books, 1970), 5.

²⁵² Mitchell Ash, *Gestalt Psychology in German Culture, 1890-1967: Holism and the Quest for Objectivity* (Cambridge, Mass.: Cambridge University Press, 1995), 60.

organicist/Gestalt beliefs. These aspects of Wundtian psychology, in themselves, did little to undermine his fundamental holism in that they, too, brought disparate elements together into relationships.

By 1937, the example of his British friends' deep social concern presented Kepes with a possibility for social and political action—to travel to Spain to fight for the Republic in the Spanish Civil War. “I wanted to go to Spain to the International Brigade because that was where my heart was,” Kepes later recalled. About this time, Moholy-Nagy was offered the position as director of a new Bauhaus-oriented school in Chicago. He went to Chicago, accepted the position, and promptly cabled Kepes to ask if he would join him in the new school. This posed a dilemma for Kepes, who was torn between his intention to join the International Brigade and the possibilities of life and work in America. Difficulties in obtaining a passport for Spain and health problems tipped the scale toward the teaching position in the United States.²⁵³ In November, Kepes obtained a passport, married Juliet Appleby, and sailed for the United States. Friends and colleagues in Chicago would present Kepes with new structures for approaching art, as his British friends had. He would assimilate these ideas into *Language of Vision* as well.

²⁵³ Brown interview, 11, 12. Herbert Read tried to get him a journalist's passport through *Burlington Magazine*, but this and other attempts to enter Spain failed.

CHAPTER 5

UNIFIED SCIENCE IN CHICAGO

In this chapter I delineate a pattern similar to that of the two previous chapters. In a new city, Chicago, Kepes found socially-conscious colleagues who offered him new theories with holistic elements that blended with earlier approaches to establish his concept of visual communication.

I will discuss the connections between Kepes's *Language of Vision* and concepts from logical positivism and semiotics that Kepes was introduced to at the New Bauhaus by Charles Morris. I argue that underlying commonalities between these concepts and the seemingly competing ideas from Gestalt psychology that Kepes also used in *Language of Vision* allowed him to be able to integrate these concepts and apply them to advertising design and to an open-ended new metaphor for the process of visual communication that could be used as an example of "a positive, popular art."

In 1937, Kepes was invited by Moholy-Nagy to teach at the New Bauhaus in Chicago, a brand-new venture Moholy-Nagy was launching with the backing of a group of Chicago businessmen. Kepes assumed the position of instructor and head of the Light Studio in November, part way through the first semester. With a small faculty amplified by guest lecturers from other Chicago institutions, the New Bauhaus settled into its donated space, a former Marshall Field mansion on South Prairie Avenue.²⁵⁴

Moholy-Nagy did not intend simply to transplant the old Bauhaus program to the United States. Years had passed since the founding of the original Bauhaus, and the

²⁵⁴ Lloyd Engelbrecht, "The Association of Arts and Industries: Background and Origins of the Bauhaus Movement in Chicago" (Ph.D. diss., University of Chicago, 1973, 286-290.

nation and economy in which he was establishing his program—capitalist, democratic United States—was far different from Germany of the Weimar Republic. At the local scale, Moholy-Nagy was contractually-bound to answer to the demands of the business men’s group The Association of Arts and Industries, which had its own profit-oriented agenda in the establishment of the New Bauhaus. As Gillian Naylor has shown, the Bauhaus goals varied according to leadership and circumstance and were not monolithic.²⁵⁵ Gropius’s project of producing a unity of art and technology was transmuted by Moholy-Nagy into a project to produce a different sort of totality. As Moholy-Nagy explained in *Vision in Motion*, “By now technology has become as much a part of life as metabolism.” Absorbing and utilizing modern technology, which is no longer a novelty but fully part of life, presents only part of the challenge. Today, Moholy-Nagy asserts, “The task therefore is to educate the contemporary man as an *integrator*, the new designer able to re-evaluate human needs warped by machine civilization.” [Moholy-Nagy’s italics]. Everything pertaining to the life of humankind—physical, intellectual, emotional, and social needs—must be integrated through art, science, and technology.²⁵⁶ When Moholy-Nagy presented his program of education for such a totality to Gropius, the latter deemed it far too ambitious to be carried out with the resources Moholy-Nagy had available to him. Undaunted, Moholy-Nagy supplemented his small art and design staff with part-time instructors drawn from the faculty of the University of Chicago, and invited well-known figures to give guest lectures.²⁵⁷

Moholy-Nagy set up the New Bauhaus with college-level courses in three areas: basic design; drawing, modeling, photography; and scientific subjects, to be covered in four years. For an architecture degree, one or two additional years of study were required. Students were to spend one year in the preliminary course and three school years in a special workshop, similar to the Dessau Bauhaus curriculum. However, the physical

²⁵⁵ Alain Findeli, “Moholy-Nagy’s Design Pedagogy in Chicago (1937-46).” *Design Issues* 7, no. 1 (Autumn 1990): 4-19. Gillian Naylor, *The Bauhaus Reassessed: Sources and Design Theory* (New York: I.P. Dutton, 1985).

²⁵⁶ Moholy-Nagy, *Vision in Motion*, 63-64.

²⁵⁷ Sibyl Moholy-Nagy, 150.

sciences (geometry, physics, chemistry and mathematics), life sciences (biology, physiology, and anatomy) and a course called “Intellectual Integration” had no parallel at the Bauhaus. The science courses were taught by part-time instructors drawn from the faculty of the University of Chicago: Carl Eckart, physics professor, and Ralph Gerard, physiology professor. A course called “Intellectual Integration” was taught by Charles W. Morris, philosophy professor there.²⁵⁸

Kepes said, “We could not just transport Bauhaus ideas to this country, we had to improvise almost every day, to feel out what the needs are, to find answers.” Yet while Moholy-Nagy’s book *Vision in Motion* asserts a positive, dynamic, orderly approach to the education of artists and designers at the Chicago school, Kepes’s memories of the early years of the school reveal a much more contingent and hectic situation.²⁵⁹ In the first year or two, the content of the courses he taught was in a state of continual development, and “some of these exercises, which were really just innovations for a moment, figured out for one day, not assuming that it will become repeated next year.” Kepes called the assembly—students (often older, but with little understanding of Bauhaus principles, or with preconceptions based on work with teachers at other schools such as Hans Hoffman’s), teachers of highly varied backgrounds (he mentions sculptor Archipenko, Morris, and the neuro-physicist Gerard) and board members (Museum of Modern Art curator James Johnson Sweeney, for example)—a “clear mixture of unmixable entities.” The University of Chicago faculty’s “competence was geared to a much higher level of student body than a few artists who had no previous training, so they were just foreign bodies in the school community. But on the faculty level it became really a very exciting and a welding experience.”²⁶⁰ Kepes and Morris were friends, and Morris read the manuscript of *Language of Vision*, helping him with it “on and off.”

²⁵⁸ The New Bauhaus American School of Design catalogue 1938-39. University of Illinois at Chicago Special Collections, Institute of Design Box 3 folder 54. Sibyl Moholy-Nagy, *Experiment in Totality*, 152. Lloyd Engelbrecht, 286-290.

²⁵⁹ Moholy-Nagy, *Vision in Motion*, see especially 63-111.

²⁶⁰ Kepes interview with Brown, 14-16.

Kepes recalled, “And through him I got some understanding [of] certain aspects of contemporary thinking in linguistics.”²⁶¹

Morris’s specialty was semiotics, and along with logical positivist Rudolf Carnap and philosopher and mathematician Otto Neurath and others, he helped found the Unity of Science movement. This movement, an outgrowth of Vienna Circle logical positivism, sought to link all the sciences by means of one simple language-based system of statements. Logical positivism was not monolithic, and the philosophers associated with it did not all subscribe to identical views. But in general, logical positivists, especially Carnap, aimed to make the “exact sciences,” not philosophy, the model for knowledge.²⁶² Logical positivists generally propounded logic and empiricism and eschewed metaphysics, holding that only empirically verifiable statements are true. My vast oversimplification omits all nuanced arguments among the philosophers, including in particular Carnap’s concept of “protocol statements,” which are intended to serve as foundations to other statements of science and have no need of justification.

Moholy-Nagy was acquainted with philosopher Rudolf Carnap, who had delivered lectures at the German Bauhaus in 1929 (after Moholy-Nagy left the Bauhaus), and who had taken a position with the University of Chicago in 1936, primarily due to Morris’s efforts.²⁶³ Carnap introduced Charles Morris to Moholy-Nagy and the group found much common ground.²⁶⁴ In the New Bauhaus catalogue Morris wrote, “Moholy-Nagy knew of the interest of Rudolf Carnap and myself in the unity of science movement. He once remarked to us that his interest went a stage farther: his concern was with the unity of life. It was his belief that all the cultural phalanxes at any time moved abreast, though often ignorant of their common cultural front. Certain it is that the

²⁶¹ Kepes interview with Brown, 24.

²⁶² Michael Friedman, “The Re-Evaluation of Logical Positivism,” *The Journal of Philosophy* 88 no. 10, (1991). As reprinted in *The Legacy of the Vienna Circle: Modern Reappraisals*, ed. Sahotra Sarkar. 181-195. (New York: Garland Publishing, 1996).

²⁶³ Peter Galison, “Aufbau/Bauhaus: Logical Positivism and Architectural Modernism.” *Critical Inquiry* 16, no. 4 (Summer 1990): 709-712, 746-49.

²⁶⁴ Englebrecht, 286.

integration and interpenetration of the characteristic human activities of the artist, scientist, and technologist is a crying need of our time.”²⁶⁵

Required of all students, Morris’s course on Intellectual Integration reflected Morris’s and Moholy-Nagy’s common interest in integrating and unifying knowledge. In a report of April 2, 1938 requested by Moholy-Nagy, Morris divided the main human activities into three groups: art, science and technology. (This triumvirate would reappear as three discourses in Morris’s publications of 1939.) He explained that “[t]he purpose of this course is to get as clear an idea as is possible of the main human activities (grouped under the general headings of art, science, and technology). It hopes to give the verbal correlate of what, as I understand it, the Bauhaus is attempting to accomplish in practice.” Morris began the course with a discussion of the theory of signs, followed by a discussion of the formal sciences (formal logic and mathematics) and the empirical sciences. “The treatment of science was based on the study of the interrelationship of the terms of the various sciences; the aim was to show the unity of science by showing how all the terms of the sciences can be stated progressively on the basis of a few terms drawn from the everyday language. The humanistic as well as the natural sciences were included in the development of the general thesis. We are now discussing the question as to how far art can be regarded as a language.” Students were to write a paper called “Art and Language.” Morris put a galley proof of his book *Foundations of the Theory of Signs* on reserve in the library for students to read and discuss in relation to their course work.²⁶⁶

Up to this point, Morris’s principle writings treated art only in passing. In *Foundation of the Theory of Signs*, first published in 1938, he included fewer than two pages on “Humanistic Implications of the Semiotic” and included virtually nothing about art.²⁶⁷ Perhaps his experiences teaching in an art and design school encouraged Morris to

²⁶⁵ The New Bauhaus American School of Design catalogue 1938-39. University of Illinois at Chicago Special Collections, Institute of Design Box 3 folder 54.

²⁶⁶ “Intellectual Integration,” by C.W. Morris, typescript, University of Illinois at Chicago Daley Library Special Collections, Institute of Design archives box 3 folder 64.

²⁶⁷ Charles Morris, “Foundations of the Theory of Signs,” in *Foundations of the Unity of Science: Toward and International Encyclopedia of Unified Science* v. 1, nos. 1-10, ed. Otto Neurath, Rudolf Carnap, and Charles Morris (Chicago: University of Chicago Press, 1970), 78-137. Originally published in 1938. Morris says for readers of

clarify his thinking about the relationship of art to an empirical sign system. By 1939, two articles appeared in which he wrestled with the relationship of art, aesthetics, and his theory of signs. In both we see the three groups of human activity to which he introduced the New Bauhaus students developed into the idea of three discourses. The essay “Esthetics and the Theory of Signs” appeared in *The Journal of Unified Science* in June 1939. In this article, he presents a specialized approach to what he terms “semiotic” and delineates the relationship of aesthetics to the semiotic. Morris’s essay in the autumn 1939 issue of fledgling journal *The Kenyon Review* simplifies and clarifies the basic ideas of “Esthetics and the Theory of Signs” for a more general audience.²⁶⁸

Even before his association with the New Bauhaus, Morris explored the interrelationship of the structures of art and language. His focus is evident not only in his scholarship but also in his correspondence with his Unity of Science colleague Otto Neurath, known not only as a logical positivist and social scientist but as the inventor of a “picture language” he called ISOTYPE (International System of Typographic Picture Education). This picture language was built upon standardized symbols or emblems in proportional sizes or arrangements to visually convey such ideas as infant mortality in various nations due to tuberculosis and accidents; or a comparison of the vertical heights of a typical town in the middle ages with that of a modern city (fig. 24).²⁶⁹ Neurath developed this picture language in 1920s Vienna in his capacity as museum director for the Siedlungsmuseum, a museum for city planning, with the input of designer Gerd Arntz and Marie Reidemeister (later as his wife, Marie Neurath). The goal of the picture

lyric poetry, “values and evaluations” stand out, not “syntax and terms.” The applied arts “rest on true propositions relevant to the accomplishment of certain purposes (‘to accomplish x, do so and so’); moral judgments may similarly have an empirical component.”

²⁶⁸ Charles Morris, “Esthetics and the Theory of Signs,” *The Journal of Unified Science (Erkenntnis)* 8, no. 1/3 (June 1, 1939): 131-150. In developing this essay, he looks to John Dewey’s *Art as Experience*, among other sources, as well as a literature on value, which includes works by Dewey as well as G. H. Mead. Morris, “Science, Art and Technology,” *The Kenyon Review* 1, no. 4 (Autumn 1939): 409-423.

²⁶⁹ Otto Neurath, *Modern Man in the Making* (New York: Alfred A. Knopf, 1939), 125, 126.

language was to convey complex information about public health, education, and housing to ordinary people in support of government efforts at planning and public improvement.

George A. Reisch writes that “for Neurath, science’s total task included both its development as an integrated whole, as ‘unified science,’ and also the spread of an international, empirical and scientific sensibility.” His new picture language would promote that scientific sensibility, even among people who could not read. “Ultimately, Neurath hoped, unified science would be a tool for a scientifically minded world society to plan and manage its operation and development.” Planning would be the key to achieving these social and scientific goals.²⁷⁰

Neurath himself wrote, “Real planning is becoming universal—planning as a war measure, planning as an anti-depression medicine, and planning as the basis of a new social order. It may be said that planning is ‘fashionable,’ and, because it is widely imitated, also ‘modern,’ in spite of all theoretical criticism against a planned economy.”²⁷¹ Perhaps because of his connection to Neurath through Morris, or perhaps because planning was “fashionable,” Kepes includes a comment on it in the Dynamic Iconography chapter of *Language of Vision*. He writes, “Only if we can guide the events of our time toward ‘planned,’ integrated social organization, can we reach a new temporary equilibrium; a more satisfactory human life.”²⁷² Kepes’s comment on planning appears at the end of his discussion of values, treated above in connection with Morris’s ideas.

In 1934 Neurath and his colleagues moved to The Hague, and he and Morris began their correspondence on the *Encyclopedia of Unified Science* project.²⁷³ In 1936-

²⁷⁰ George A. Reisch, “Planning Science: Otto Neurath and the International Encyclopedia of Unified Science” *British Journal for the History of Science* 27 (1994): 153-74. As reprinted in Sahotra Sarkar, *The Legacy of the Vienna Circle: Modern Reappraisals*, vol. 6 in *Science and Philosophy in the Twentieth Century: Basic Works of Logical Empiricism*, 131-153 (New York: Garland, 1996)

²⁷¹ Otto Neurath, *Modern Man in the Making* (New York: Alfred A. Knopf, 1939), 86.

²⁷² *Language of Vision*, 201.

²⁷³ Unity of Science Movement Records 1934-1968, Box 2 Folder 6, University of Chicago Library Special Collections.

37, Neurath visited the United States.²⁷⁴ In a letter to Morris from his New York City hotel during that visit, Neurath reported on a group of proposals to the Carnegie Corporation involving the publication of a book resulting from tests for educational purposes of “different kind [sic] of visual aids for education, pictures, movies, cartoons, models, etc. . . . We must analyse “Visual Cooperation”. I would be very pleased if we both would cooperate in the field of analyzing picture writings. You are a specialist for SIGNS!””

After discussing alternatives should Carnegie not be interested, Neurath writes, “I am very glad, that we see possibilities to prepare pictures also useful for our encyclopedia. Unification of logical language, Unification of visual language – but all these attempts by friendly cooperation. I hope that all our work is more or less an anticipation of a peaceful period. . . . We are very interested in movies especially in cartoons. We produced such kind of visual aids which are very interesting for people of all ages. VISUAL LANGUAGE IN MOTION.”²⁷⁵ (Neurath’s emphasis.)

This reference to visual language (as opposed to “grammar of art” or “language of art”) is the first that I can discover outside of Kepes’s book. The term also anticipates Moholy-Nagy’s book title *Vision in Motion* of 1946. Undoubtedly these ideas circulated not only among Neurath, Morris and the Unity of Science group, but also among Morris and the faculty of the New Bauhaus, naturally including Moholy-Nagy and Kepes.

Yet important differences stand between Kepes’s use of the term visual language and Neurath’s. Kepes uses both visual language and language of vision, making the two terms roughly equivalent, both implying communicative potential. For Kepes, language of vision, in particular, emphasized physiological vision or seeing and how seeing is ordered by the viewer. His use of the term visual language tends to emphasize the ordering or structuring of vision or seeing. Kepes’s use of the term language is more or less metaphorical. For Neurath, however, the term visual language emphasizes the

²⁷⁴ Neurath’s visit and his ISOTYPE system are described in “Social Showman,” *Survey Graphic* 25 no. 11 (Nov. 1936): 618 and Otto Neurath, “Visual Education: A New Language,” *Survey Graphic* 26, no. 1 (January 1937): 25.

²⁷⁵ Letter of Otto Neurath to Charles Morris, Jan. 6, 1937, Unity of Science Movement papers, University of Chicago Library, Special Collections Box 2 Folder 7.

functioning of pictures or symbols as a simple language, with the word visual meaning “like pictures or symbols,” not understood broadly as Kepes does, as a broad optical capacity. It appears that Charles Morris, through his function as New Bauhaus instructor of intellectual integration with a specialist’s interest in unifying languages of sciences and humanities, was an agent in the transformation of Neurath’s term visual language into Kepes’s far more inclusive term language of vision.

What Neurath and Kepes have in common is a neutral stance toward advertising methods as a vehicle. Neurath sees his picture language as similar to or parallel to “advertisement by pictures” with one primary exception: each advertisement must call attention to itself through its difference and cause the viewer to forget other advertisements. By contrast, Neurath’s picture language is systematic; “all pictures are part of a unit: they are using the same language.”²⁷⁶ He anticipates the same sort of social benefit from a systematic visual language that Kepes does. He writes, “Education by pictures in harmony with the ISOTYPE system, advertisement by ISOTYPE signs, will do much to give the different nations a common outlook. If the schools give teaching through the eye in harmony with this international picture language they will be servants of a common education all over the earth, and will give a new impulse to all other questions of international education.”²⁷⁷ Kepes’s visual language is far more complex than the simple, clear-cut ISOTYPE system, but for Neurath, as for Kepes and the avant-garde of the early twentieth century, advertising is a neutral vehicle with potential for good.

For Kepes, Morris’s ideas on the interconnectedness of things, languages, and activities would have jibed well with ideas of wholeness taken from Gestalt psychology. In “Science, Art and Technology” Morris discusses human culture as “a web of sign-sustained and sign-sustaining activities”²⁷⁸ As parts of this web, scientific discourse helps

²⁷⁶ Otto Neurath, *International Picture Language/Internationale Bildersprache*, facsimile reprint of the 1936 English edition, with a German translation by Marie Neurath, ed. by Robin Kinross (Reading, 1980), 28.

²⁷⁷ Neurath, *International Picture Language*, 18.

²⁷⁸ Charles W. Morris, “Science, Art and Technology,” *Kenyon Review* (Autumn 1939): 411.

humans make predictions, aesthetic discourse helps people deal with the human need for values, and technological discourse helps people to satisfy needs. Aesthetic discourse is not language used to discuss art, but it is the actual work of art itself (poem, painting, music). Morris defines a work of art as: “a sign which designates the value or value structure in question, but has the peculiarity, as an iconic sign, that . . . the value it designates is embodied in the work itself, so that in perceiving a work of art one perceives directly a value structure. . . . Art is the language for the communication of values.”²⁷⁹

The last chapter of Kepes’s book, “Toward a Dynamic Iconography” seems to show the influence of Morris’s ideas, especially in those sections in which he discusses “sign systems,” although there is no true correspondence of Morris’s theory of signs and Kepes’s ideas. “Inherited visual language has fossilized the events in a static sign system,” Kepes writes. “Revolution in the plastic arts has brought back a dynamic approach on the sensory level. . . . The task of the contemporary artist is to release and bring into social action the dynamic forces of visual imagery.”²⁸⁰ Kepes here seems to be moving beyond Morris’s definition of art as communication of values to something far more active, as when Kepes states, “When the plastic organization and the organization of the meaningful signs are synchronized into a common dynamic structure, we have a significant implement of progress.” From these new images, viewers will get a sensory as well as intellectual experience from which “the nervous system can acquire the new discipline necessary to the dynamics of contemporary life.”²⁸¹ More active than Morris’s communication of value would suggest, and more integrated than Golec’s “Disembodied Eye” would allow, Kepes’s notion of the language of vision takes on an ambitious ameliorative project. Posters, picture books, labels, window displays could both send “socially useful messages” and “train the eye, and thus the mind, with the necessary discipline of seeing beyond the surface of visible things, to recognize and enjoy values necessary for an integrated life. If social conditions allow advertising to serve messages

²⁷⁹ Morris, “Science, Art and Technology,” 413-16.

²⁸⁰ *Language of Vision*, 201.

²⁸¹ *Language of Vision*, 209.

that are justified in the deepest and broadest social sense, advertising art could contribute effectively in preparing the way for a positive popular art, an art reaching everybody and understood by everyone.”²⁸²

²⁸² *Language of Vision*, 221.

CHAPTER 6

CONCLUSION

Language of Vision, described by Kepes as an improvised book, developed from an effort to expand the horizons of working graphic designers into an open-ended theoretical treatise on restructuring vision and reordering life. Kepes felt that he had left the book in a state of incompleteness. He said, “[T]he end of the book was what I wish I still could one day develop into a more complete notion. . . . I just thought and felt that to create very crystalline beautiful form and configuration, or create very precise rendering of our dynamic continuum of space was not enough. One’s response to the world has also emotional, and symbolic dimension.” So his final chapter, “Dynamic Iconography,” was his attempt to move beyond the book’s discussions of perceptions and representations of space, to treat meaning and significance and suggest new directions. Had he been able to more fully develop the chapter, he said, “it would have led to film making, to television, to whole new idioms of kinetic or dynamic communications.”²⁸³

The fact that *Language of Vision*’s final chapter was not quite complete in its author’s eyes—and might have been extended from graphic design to immaterial moving images—serves as an example of the fluidity and adaptability of its project. *Language of Vision* is an open-ended text, which proposes an open-ended meliorative vision. One of the primary reasons for its popularity is its capacity to inspire hope, gesturing in the general direction of progress, while allowing for a multitude of paths to it.

Just as the book’s open-ended quality allowed for discussions of graphic design to shift toward film, so also was the book capable of being applied to architecture. Even today, decades after its first publication, *Language of Vision* is drawn into architectural

²⁸³ Kepes interview with Brown transcript, 20-23.

discourse and is capable of encompassing varied views. In *The Organizational Complex* (2003), Reinhold Martin argued that *Language of Vision* was complicit with module-restricted, pattern-seeking architecture of the 1960s in advancing the organizational control of people, machines, and technology of the military-industrial complex.²⁸⁴ In a very different approach, Olaf Arndt sees *Language of Vision* as predictive of an organic architecture trend of the 1990s that rejects the severe purity of early twentieth-century European architecture, yet incorporates capabilities of machines (computers) to achieve a dynamic morphing of form.²⁸⁵

The longevity and the adaptability of Kepes's language of vision have implications for art education and on the practice of design that are yet to be explored. The rise of abstract expressionism, which is at odds with the aims of the book, correlated with a growing distance between painting and commercial design. The reasons for this separation and the role of *Language of Vision* in it need further research. More remains to be discovered about the effects of the *Language of Vision* in terms of theory and pedagogy for the Chicago schools of design—the Institute of Design under Moholy-Nagy and under the Illinois Institute of Technology—and its implication for artists, architects and designers who worked there.

The overarching theme of this study is Kepes's application of concepts of structure to art and especially to graphic design, and thereby to living itself. More of structure's meaning and importance to all areas of twentieth-century thought remains to be explored, especially in the period up to 1950. During this period, much cross-fertilization in many fields—the sciences, philosophy, the arts, the social sciences—resulted in the development of the concept of structure as things or ideas set into dynamic, self-regulating relationship with one another. A large problem in recognizing the pervasiveness of this idea is the lack of a label used for this structural thinking during this period. The term was first applied to the work of Swiss linguist Fernand de Saussure (1857-1913) and assumed importance in the second half of the twentieth century when it

²⁸⁴ Martin, *Organizational Complex*.

²⁸⁵ Olaf Arndt, "Chalk and Computers: Principles of Order in Dynamic Image-Making," in *Bauhaus*, Jeannine Fiedler and Peter Feierabend, eds. (Cologne: Könemann, 1999), 592-599.

was used in Sturrock's capital-S sense to mean specific approaches to linguistics, literature, or history. Later still, Structuralism evolved (or devolved) into post-Structuralism, a concept that would seem to have little in common with the structuralism of earlier in the century, unless we recall small-S structuralism's emphasis on the dynamics of relationships.

For help in establishing the structures of structuralism, and in seeing how Kepes fits into this picture, I turn again to Donna Haraway. In 1972 when Haraway wrote her dissertation, which would become *Crystals, Fabrics and Fields* (1976), the literary and linguistic Structuralism movement was coming to an end. Using Swiss psychologist Jean Piaget's definition from his 1968 book *Structuralism*, she argues that the organicism of scientists as developed by scientists in the Theoretical Biology Club is "a structuralism."²⁸⁶ According to Piaget, structure comprises three ideas: "the idea of wholeness, the idea of transformation, and the idea of self-regulation."²⁸⁷ The concept of wholeness in this sense, as we have seen, is not based on additive parts or aggregates. Not only theoretical biology but also Gestalt psychology and to a limited extent Wundt's psychology emphasized a wholeness that is not "atomized." While the *Encyclopedia of Unified Science* has an aggregate quality that may argue against the idea of wholeness, its project of relating all empirical knowledge has an urge toward wholeness at its heart. Certainly Kepes emphasized wholeness throughout *Language of Vision*.

The second requirement of structuralism is transformation, which for Piaget involves a constant equilibration. Haraway has shown how the idea of transformation applies to theoretical biology. Piaget himself wrote about the tendency for Gestalt psychology to include transformation in the understanding of perceptual forms.²⁸⁸ Repeatedly in *Language of Vision* Kepes calls for the continual adjustment of artists' and viewers' perceptions and mental attitudes, from the created image to the visible, physical world, and back again to image.

²⁸⁶ Haraway, *Crystals, Fabrics, and Fields*, 62.

²⁸⁷ Piaget, 5.

²⁸⁸ Piaget, 11.

Self-regulation, Piaget's third requirement of structuralism, involves "self-maintenance and closure" so that the laws of structure are preserved at all levels, from less to more complex.²⁸⁹ Haraway applies this idea to biology, and, while this is somewhat more difficult to apply to Kepes's ideas, his frequent emphasis on integration resonates with Piaget's "self-regulation." In the preface to his book, Kepes states, "To function in his fullest scope man must restore the unity of his experiences so that he can register sensory, emotional, and intellectual dimensions of the present in an indivisible whole."²⁹⁰ *Language of Vision* describes art-making and seeing as dynamic elements of a structure for which Kepes adopts a metaphor of a perceptual process—vision—and uses the added metaphor of language to express the structure of the process. In this way, Kepes participated in the mid-century, multi-disciplinary structuralist movement which did not yet have a name.

²⁸⁹ Piaget, 13-16.

²⁹⁰ *Language of Vision*, 63.

APPENDIX A

FIGURES



Figure 1. Gyorgy Kepes, c. 1940. [David Travis and Elizabeth Siegel, eds. *Taken by Design: Photographs from the Institute of Design 1937-1971* (Chicago: Art Institute, 2002), 22.]

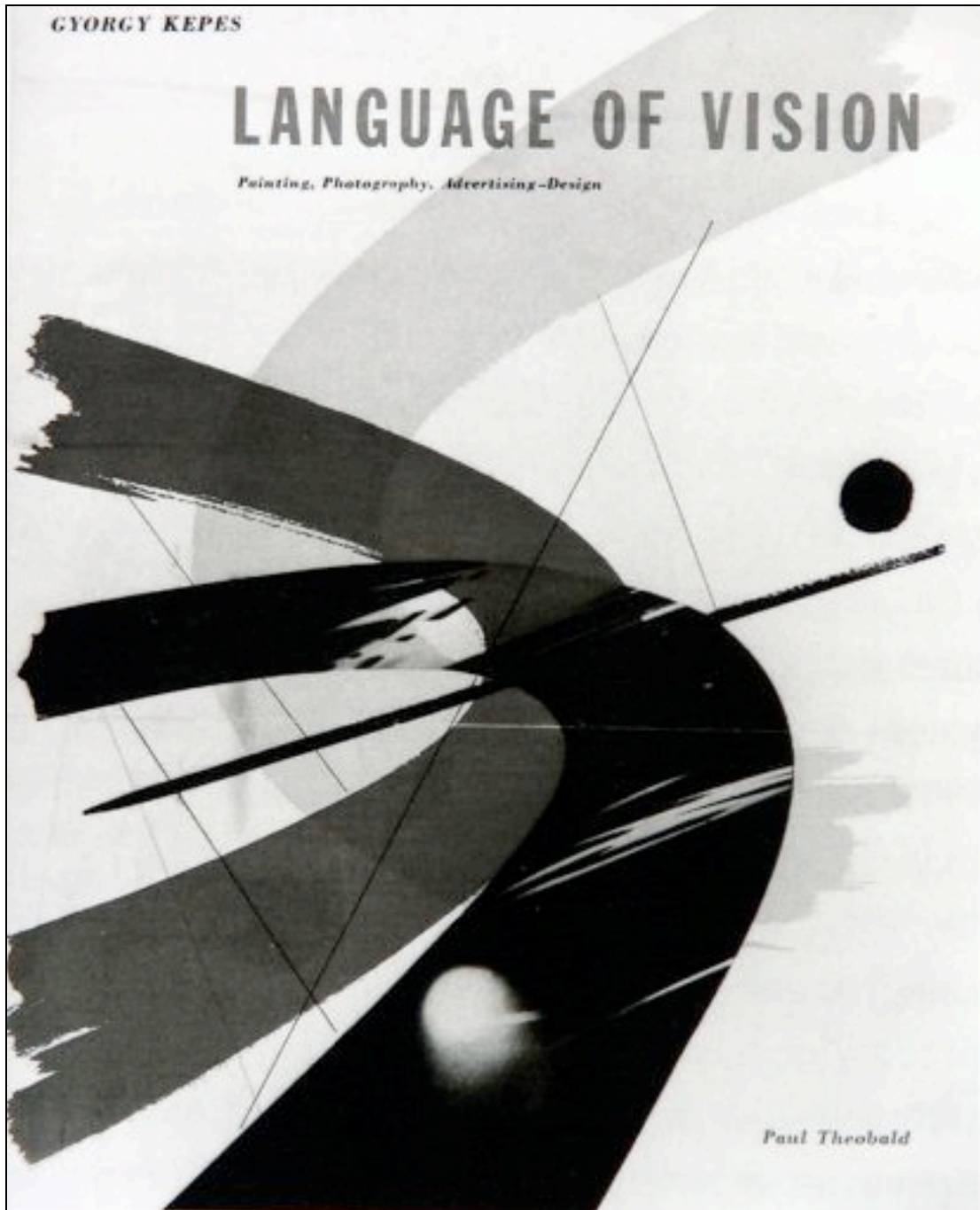


Figure 2. Dust jacket, *Language of Vision*. [David Travis and Elizabeth Siegel, eds. *Taken by Design: Photographs from the Institute of Design 1937-1971* (Chicago: Art Institute, 2002), 32.

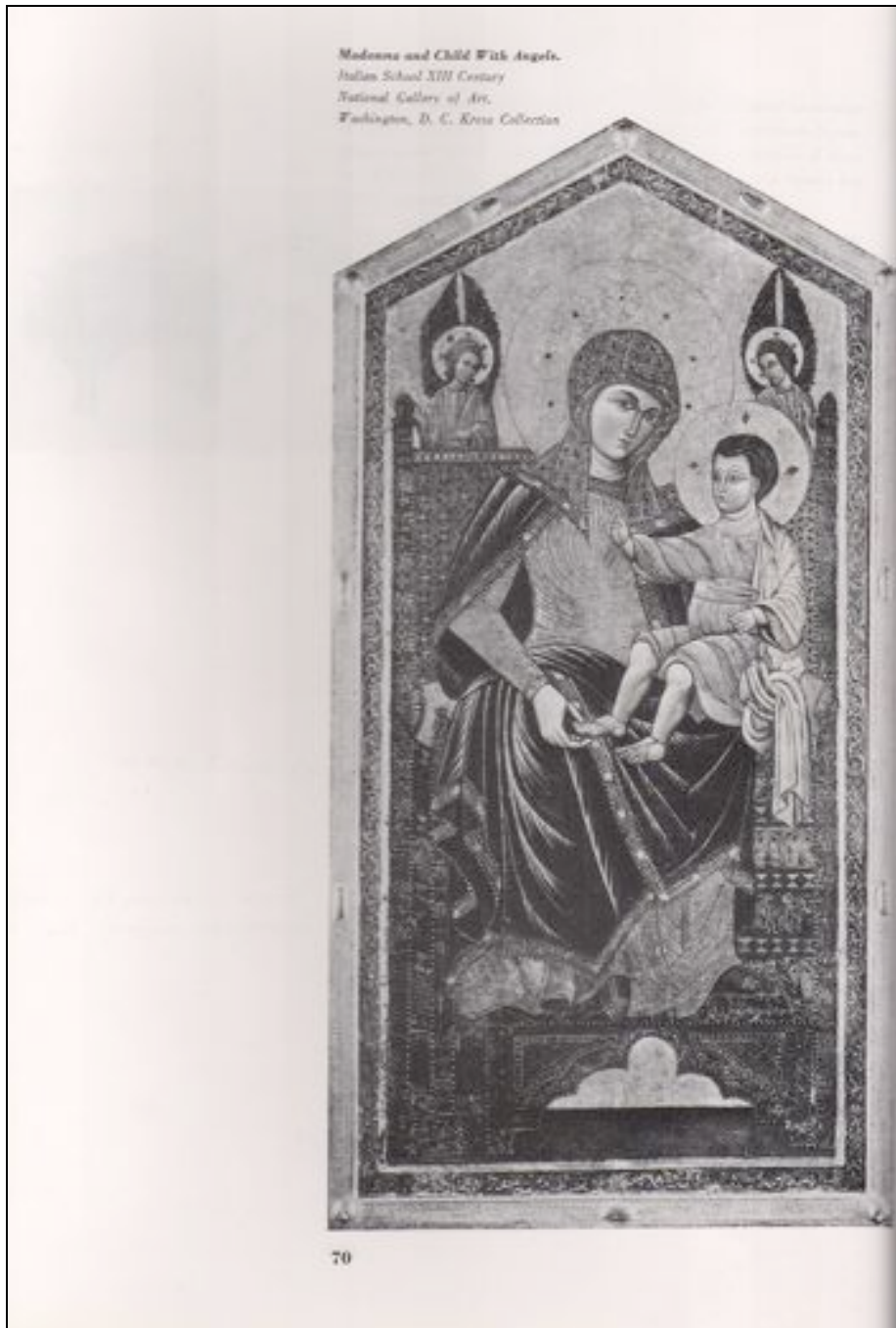


Figure 3. Gyorgy Kepes, *Language of Vision* (Chicago: Theobald, 1944), 70.

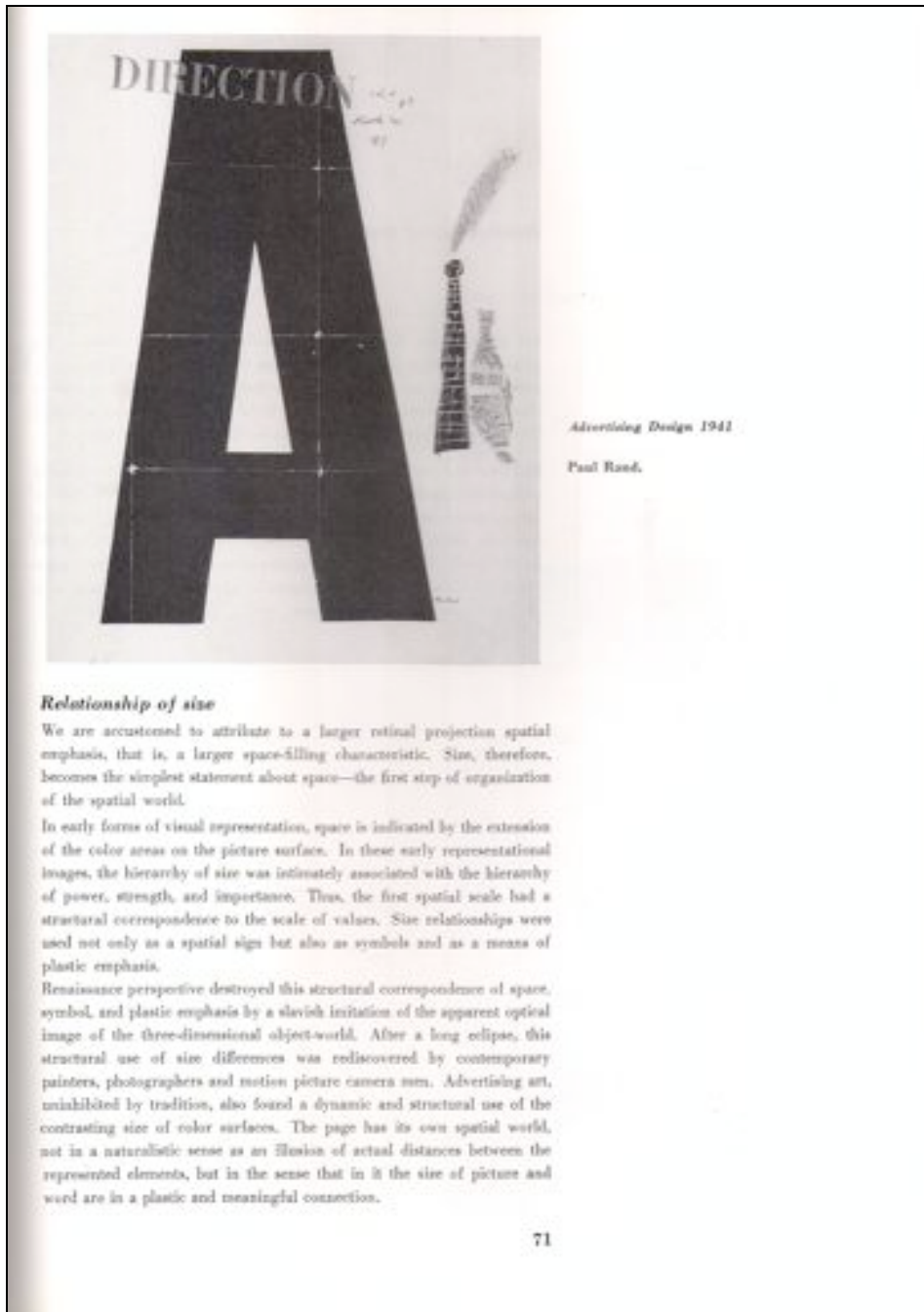


Figure 4. Gyorgy Kepes, *Language of Vision* (Chicago: Theobald, 1944), 71.



Tizianello, *Hercules and Antaeus*
 Courtesy of Wadsworth Athenaeum



Toulouse-Lautrec, *Ballet Dancers*
 Courtesy of The Art Institute of Chicago

Amplified perspective

Almost as soon as the Renaissance introduced perspective, its painters began to find the fixed system of space representation less than satisfying. Some attempted to break the bonds by going to extremes. The unified space of the linear perspective was saturated by extreme distortions. The maximum contrast of small and large was applied to inject the picture space with the optimum of vitality. The perspective framework was stretched or condensed to the utmost limits, reaching the greatest dynamic expression possible within the static linear-perspective system.

Amplified perspective is used in photography, photomontage and in motion picture as a potent device for creating a strong sense of space.

Figure 5. Gyorgy Kepes, *Language of Vision* (Chicago: Theobald, 1944), 88.

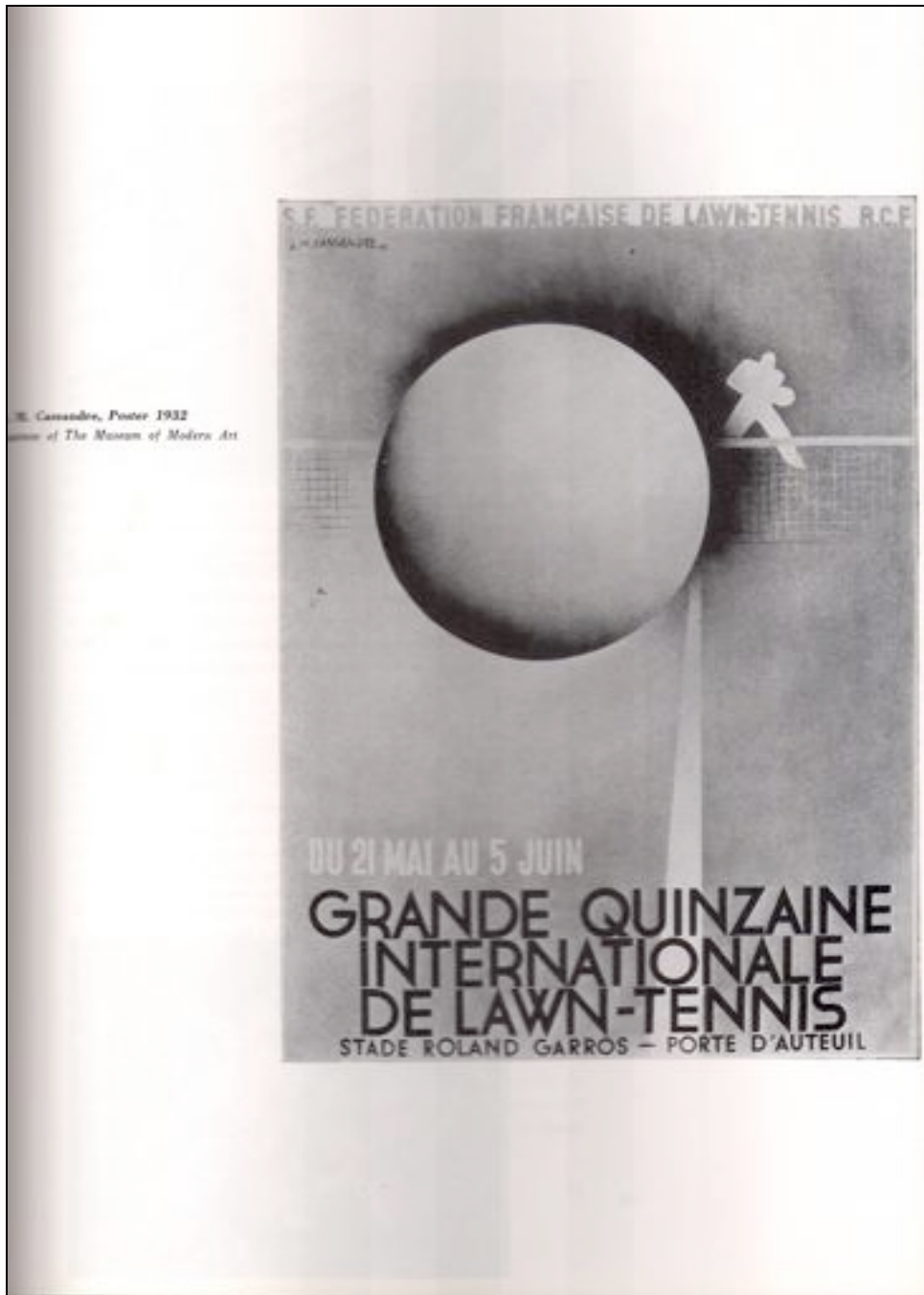


Figure 6. Gyorgy Kepes, *Language of Vision* (Chicago: Theobald, 1944), 89.



Figure 7. Gyorgy Kepes, *Language of Vision* (Chicago: Theobald, 1944), 23.

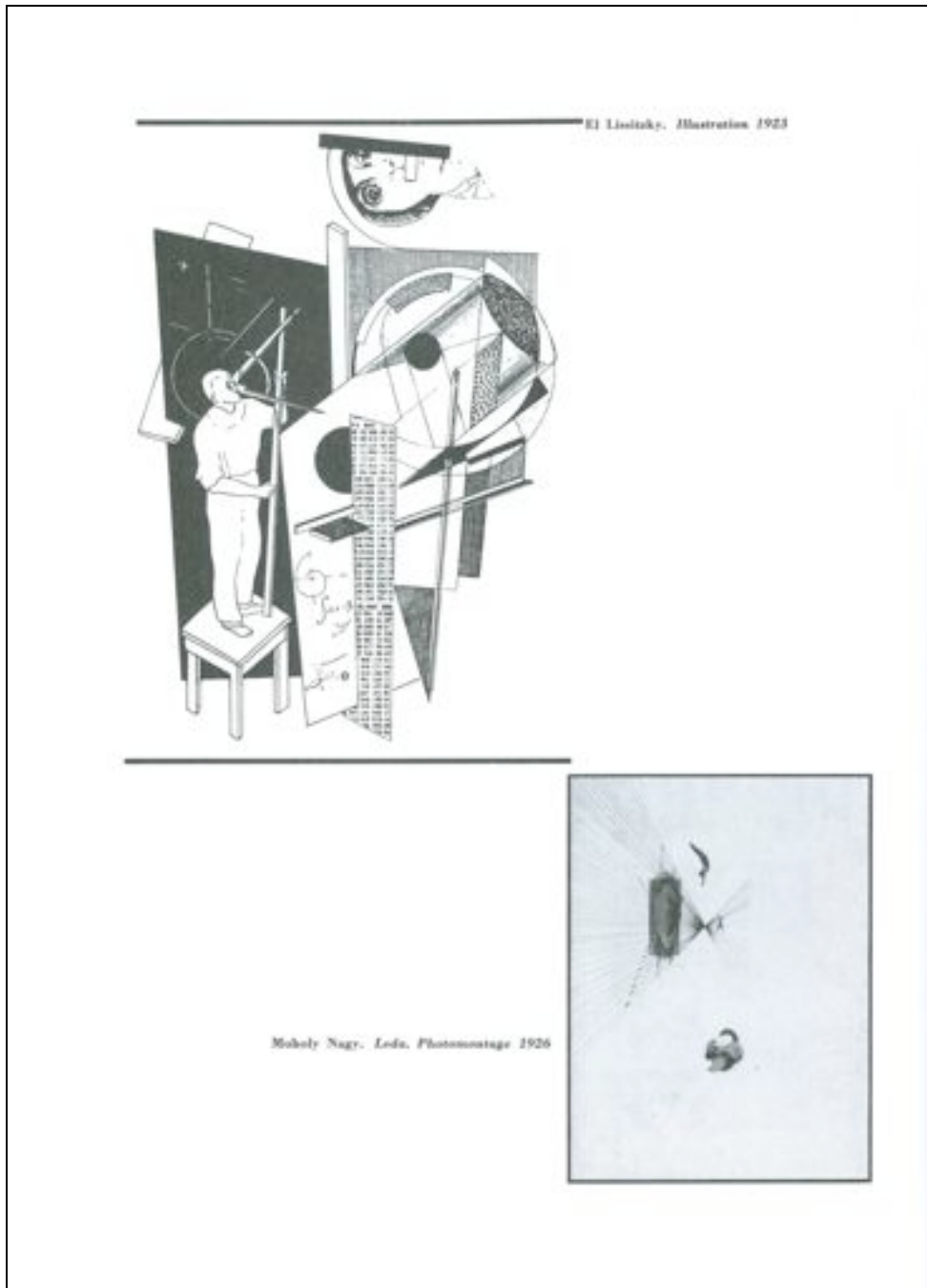


Figure 8. Gyorgy Kepes, *Language of Vision* (Chicago: Theobald, 1944), 218.

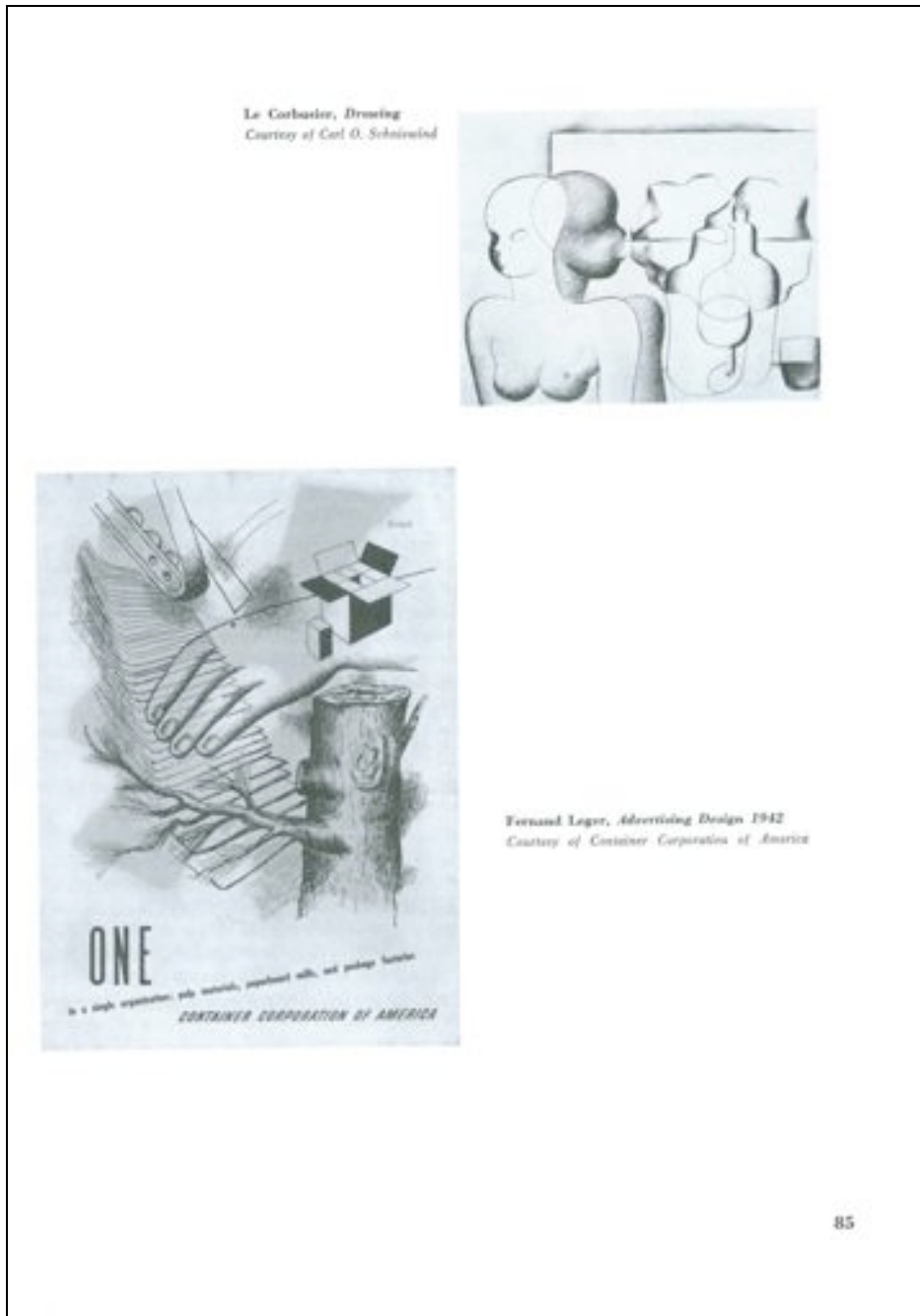


Figure 9. Gyorgy Kepes, *Language of Vision* (Chicago: Theobald, 1944), 85.



Figure 10. First location of the New Bauhaus, 1937-38. Marshall Field mansion, Chicago, with new addition for the New Bauhaus to right. [David Travis and Elizabeth Siegel, *Taken by Design: Photographs from the Institute of Design, 1937-1971*. (Chicago: Art Institute, 2002), 22.]



Figure 11. Walter Gropius (left) and László Moholy-Nagy on the staircase of the New Bauhaus, 1937-38. [David Travis and Elizabeth Siegel, *Taken by Design: Photographs from the Institute of Design, 1937-1971*. (Chicago: Art Institute, 2002), 23.]



Figure 12. Students' work in the sculpture studio of the New Bauhaus, 1940s. [David Travis and Elizabeth Siegel, *Taken by Design: Photographs from the Institute of Design, 1937-1971*. (Chicago: Art Institute, 2002), 19.]



Figure 13. Lajos Kassák. As reproduced in Ferenc Csáplár, *Lajos Kassák: The Advertisement and Modern Typography*, (Budapest: Kassák Museum, 1999), 2.

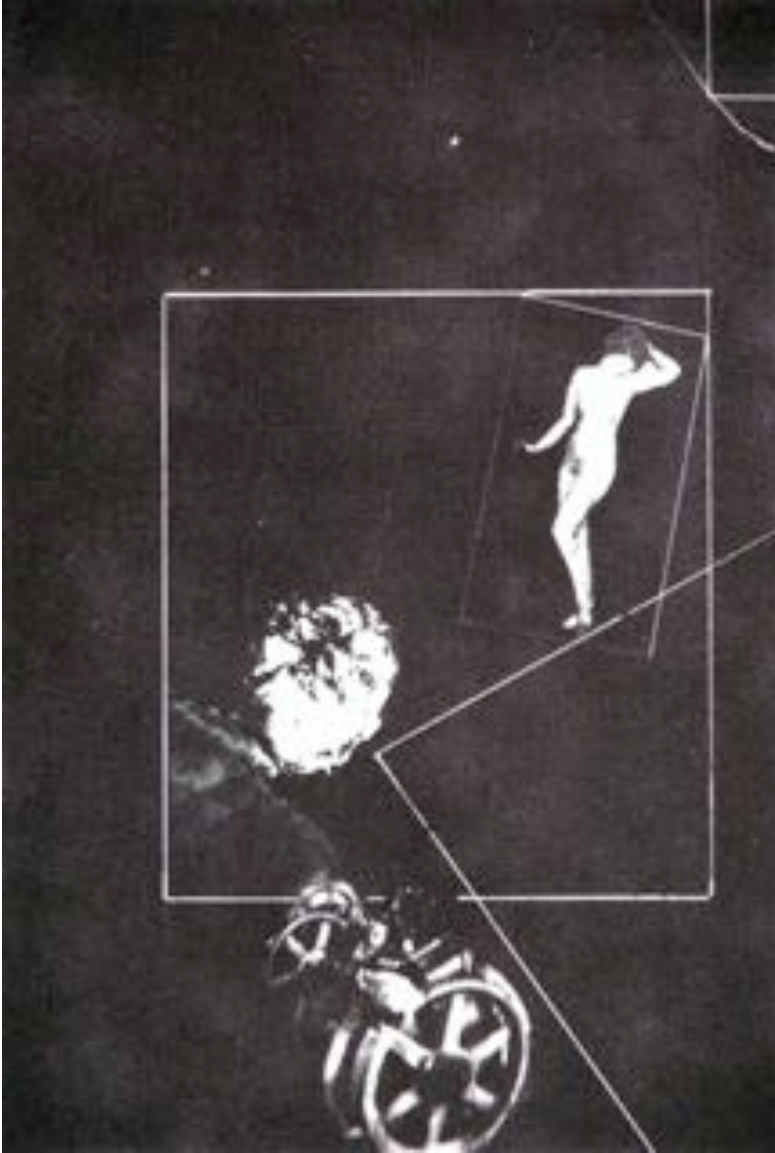


Figure 14. Gyorgy Kepes, *In Memory of L.R.*, collage, oil, sand, photograph, 36 x 20". As reproduced in Judith Wechsler, Jan van der Marck and György Kepes, *Gyorgy Kepes: The MIT Years: 1945-1977* (Cambridge, Mass.: MIT Press, 1978), 26.



Figure 15. Lajos Kassák, *Picturearchitecture V*, c. 1924, oil on cardboard, Hungarian National Gallery, Budapest, 28 x 20.5 cm. As reproduced in Timothy O. Benson, ed. *Central European Avant-Gardes: Exchange and Transformation, 1910–1930* (Cambridge, Mass: MIT/Los Angeles County Museum of Art, 2002), 158.

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Fig. 16. Advertisement as reproduced in Walter Dill Scott, *The Theory and Practice of Advertising: A Simple Exposition of the Principles of Psychology in Their Relation to Successful Advertising* (London: Sir Isaac Pitman & Sons, Ltd, 1907), 113.

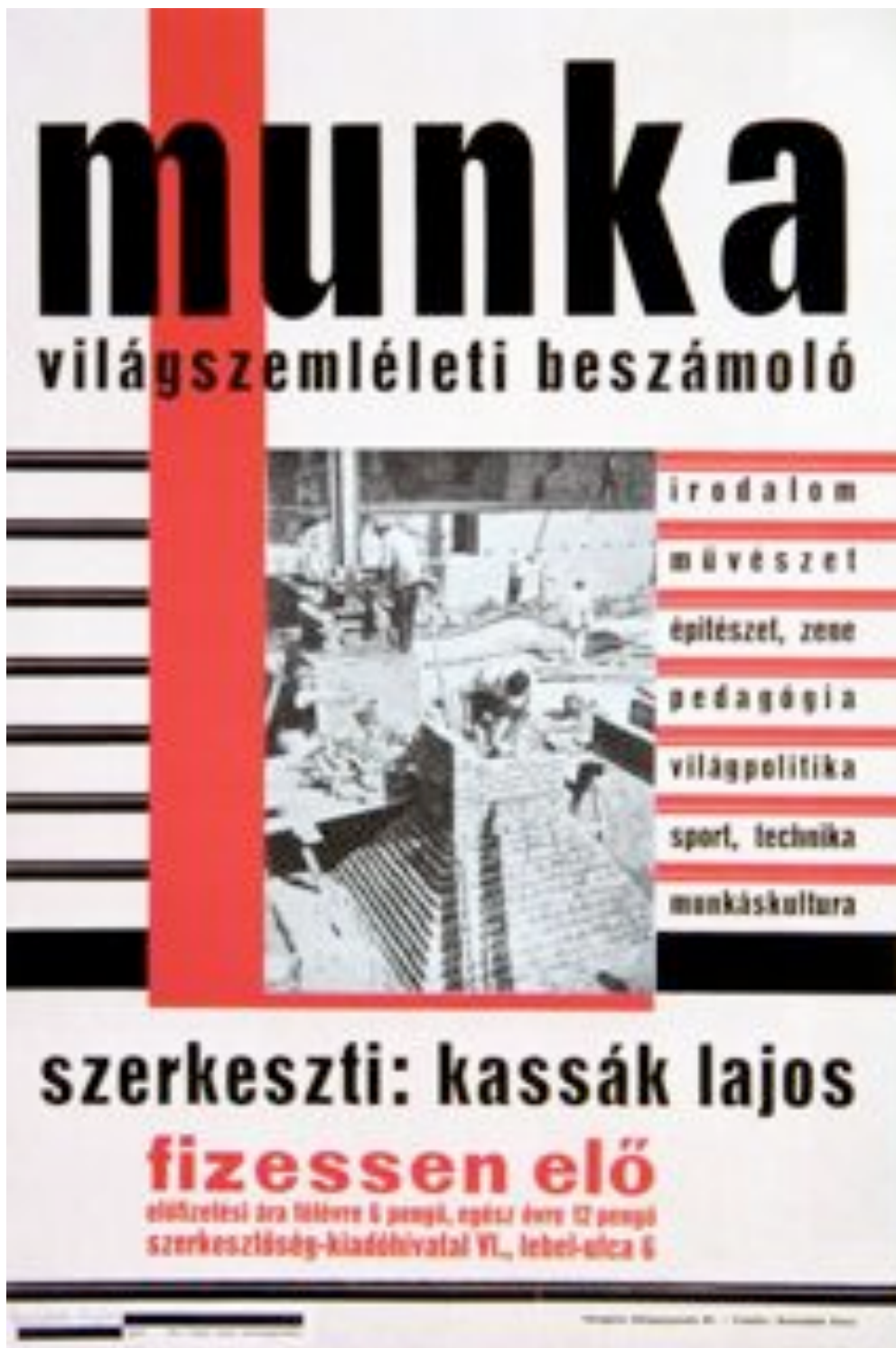


Figure 17. *Munka (Work)* poster, 1928, Haags Gemeentemuseum, 470 x 308 mm. As reproduced in Ferenc Csáplár, *Lajos Kassák: The Advertisement and Modern Typography*, (Budapest: Kassák Museum, 1999), 60.



Figure 18. *Munka* 1 (1928), cover, 262 x 185 mm. As reproduced in Ferenc Csáplár, *Lajos Kassák: The Advertisement and Modern Typography*, (Budapest: Kassák Museum, 1999), 61.



V. Levstik. Photograph

N. Lerman. Eye and Barbed Wire



Figure 19. Gyorgy Kepes, *Language of Vision* (Chicago: Theobald, 1944), 203.

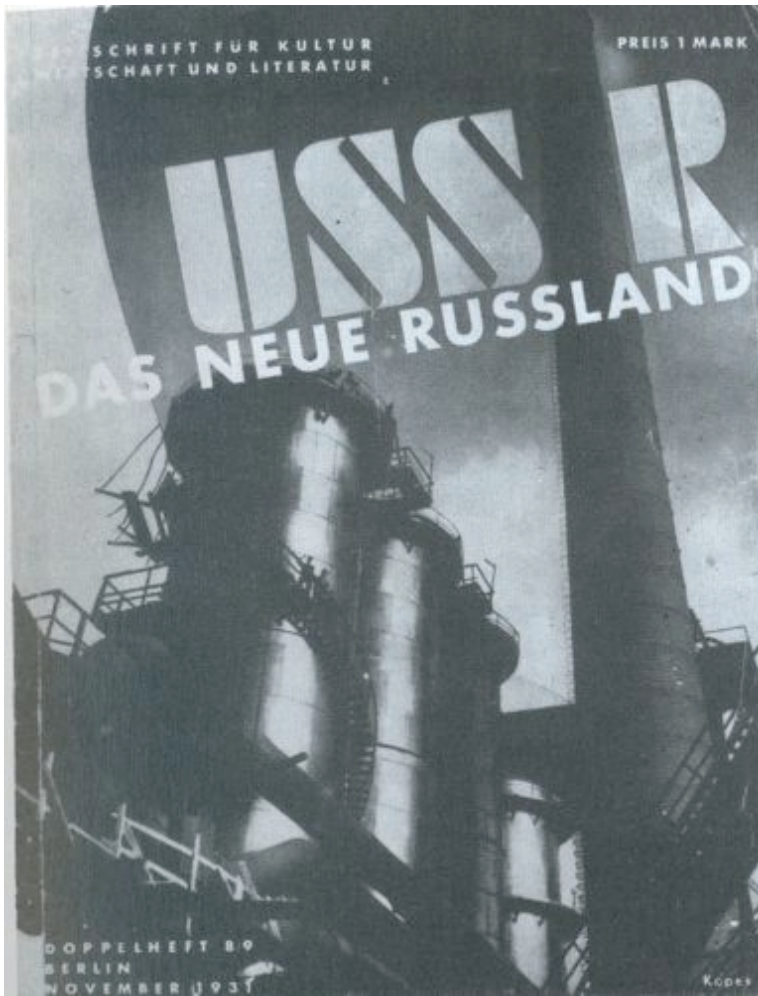
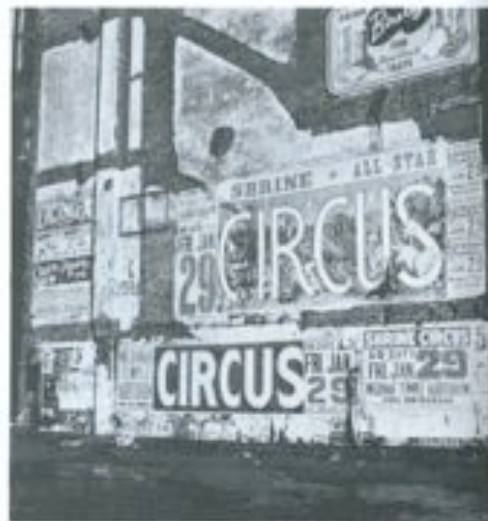


Figure 20. Gyorgy Kepes, Cover of *Das neue Russland*, issue 8/9, Nov. 1931. As reproduced in *Wechsel Wirkungen, ungarische Avant-garde in der Weimar Republik*, ex. cat., Neue Galerie, Kassel (Marburg: Jonas Verlag, 1986), 409.

The process of making

The spatial world consists not of instantaneously created units, but of processes of becoming, indefatigable transformations of spatial configurations. Nature forms; flowers, trees, rocks, mountains, cloud formations, animal or human bodies as well as man-made forms; buildings or implements, are only temporarily configurations in the perpetual flux of becoming and disappearing. Every form, therefore, is an inevitable visible record of origin. The spatial configurations of the branches of the trees, the forms of melting metals convey their story of emergence as well as a footprint in the snow or in the sand, the shape of ink spilled from the bottle, or the line patterns drawn by a pencil on a paper. The space-time past—movement—is inherent in every form.

But the space-time background that resulted in a configuration can be so great that it falls beyond the threshold of our ability to grasp it. There are numerous forms in nature whose native history is entirely concealed because the scale of complexity in their origin is too vast. One cannot sense instantaneously in a leaf, in a rock, the kinetic background of their becoming.



F. Levitzky. Photographs

Figure 21. Gyorgy Kepes, *Language of Vision* (Chicago: Theobald, 1944), 186.

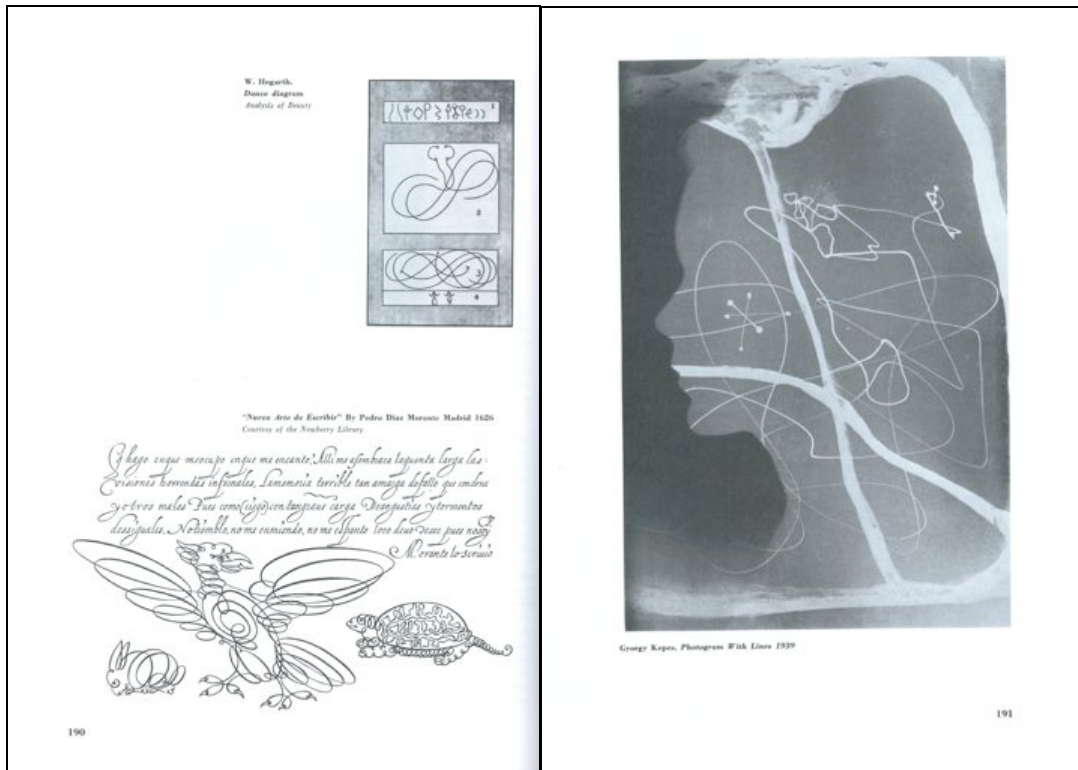


Figure 22. Gyorgy Kepes, *Language of Vision* (Chicago: Theobald, 1944), 190, 191.

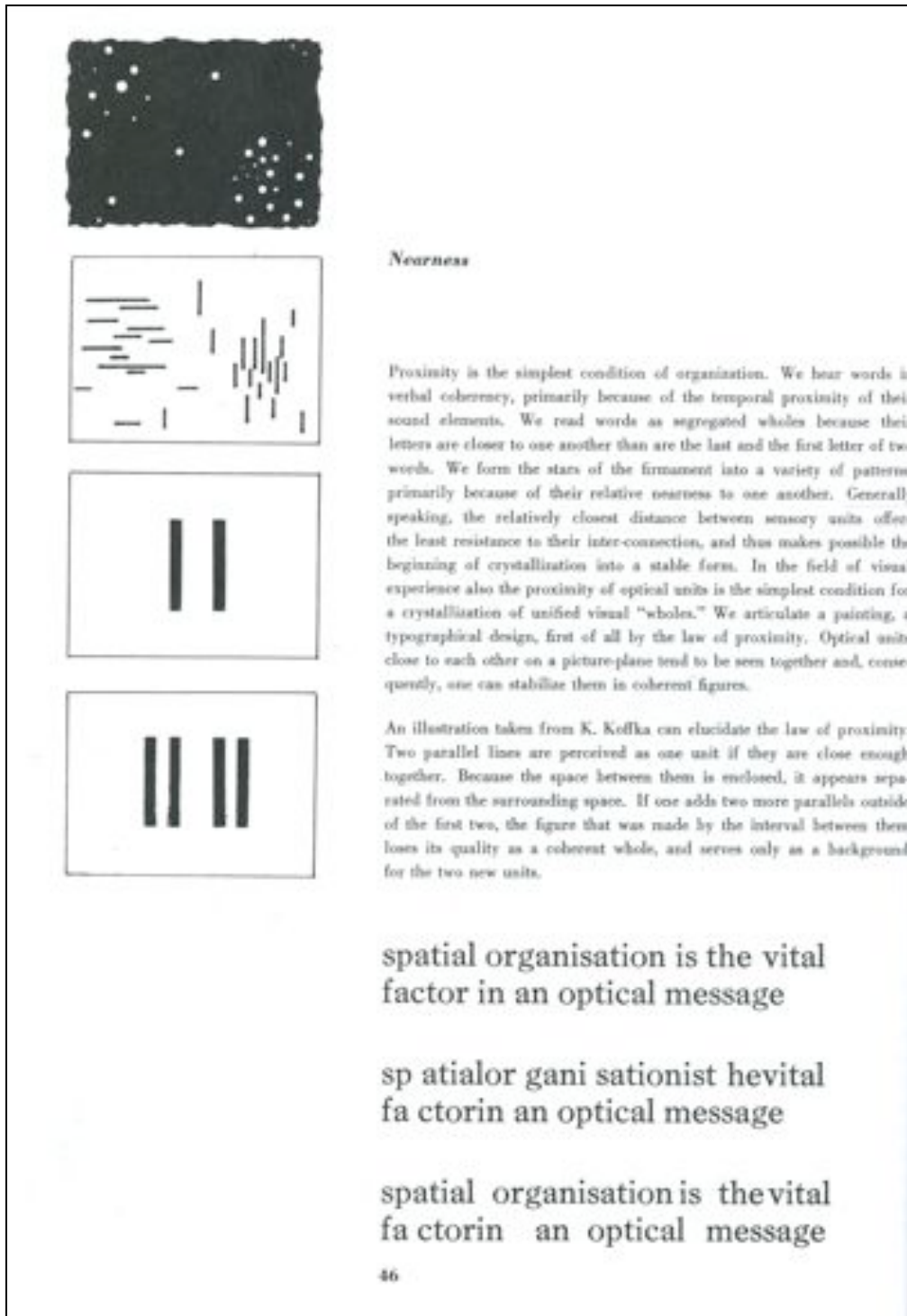


Figure 23. Gyorgy Kepes, *Language of Vision* (Chicago: Theobald, 1944), 46.

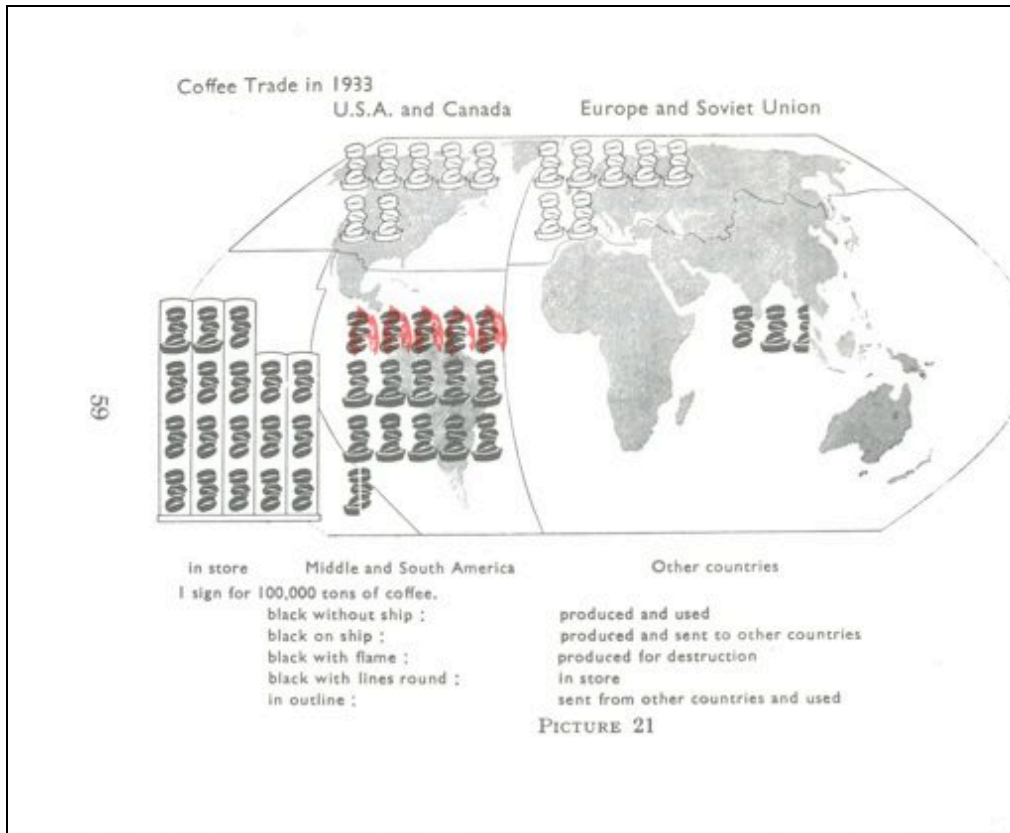


Figure 24. Otto Neurath, *International Picture Language/Internationale Bildersprache*. facsimile reprint of the 1936 English edition, with a German translation by Marie Neurath, ed. by Robin Kinross (Reading, 1980), 59.

APPENDIX B
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